

Public Utilities



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July 20, 1961

In Two Sections - Section 1

THE RAILROADS' "FOUR FREEDOMS" AND REGULATION

By Charles F. Phillips, Jr.



Public Utilities and People - Inside the Community

By James W. Carpenter and
Robert T. Livingston



Price-earnings: Price-dividends?

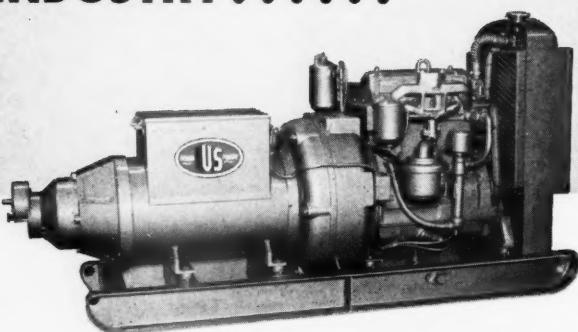
By M. Richard Sussman



Survey of Japan's Fuel and Power Industries

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JULY 20, 1961

NUMBER 2



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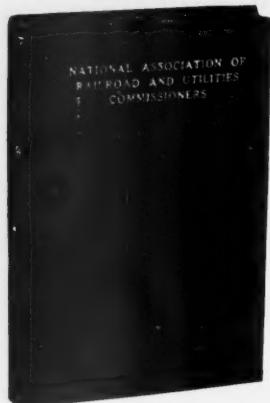
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Pages with the Editors

WITH all the critical things happening this summer, one might be tempted to overlook the hectic merger scramble that has been going on among the eastern railroads and some of the airlines. It is no longer a secret that the augmenting of some of the present duplicate and competitive operations may well be the price of survival for some of these lines over the long run.

IT would be unfair to call the competition wasteful, because essentially the problem stems from unregulated competition from private transportation—passenger automobiles, and trucks. In former years many of the railroad operations, which are now written in red ink, were found profitable and necessary. But this does not alter the fact that the main and immediately available remedy to ease the plight of both the railroads and the airlines seems to lie in corporate consolidation.

THE Doyle Report on American Transportation, published last January by the Senate Commerce Committee, made the flat comment that "We now have concrete evidence of a growing struggle approaching cutthroat proportions and which threatens the financial status of large segments of the transport system."

As for the railroads, none can be found

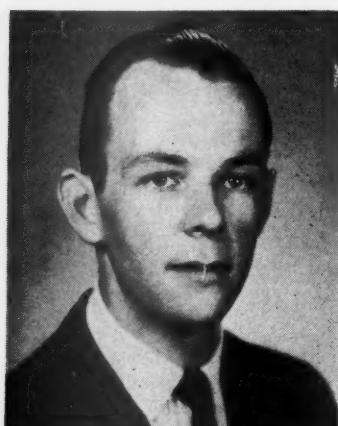


M. RICHARD SUSSMAN

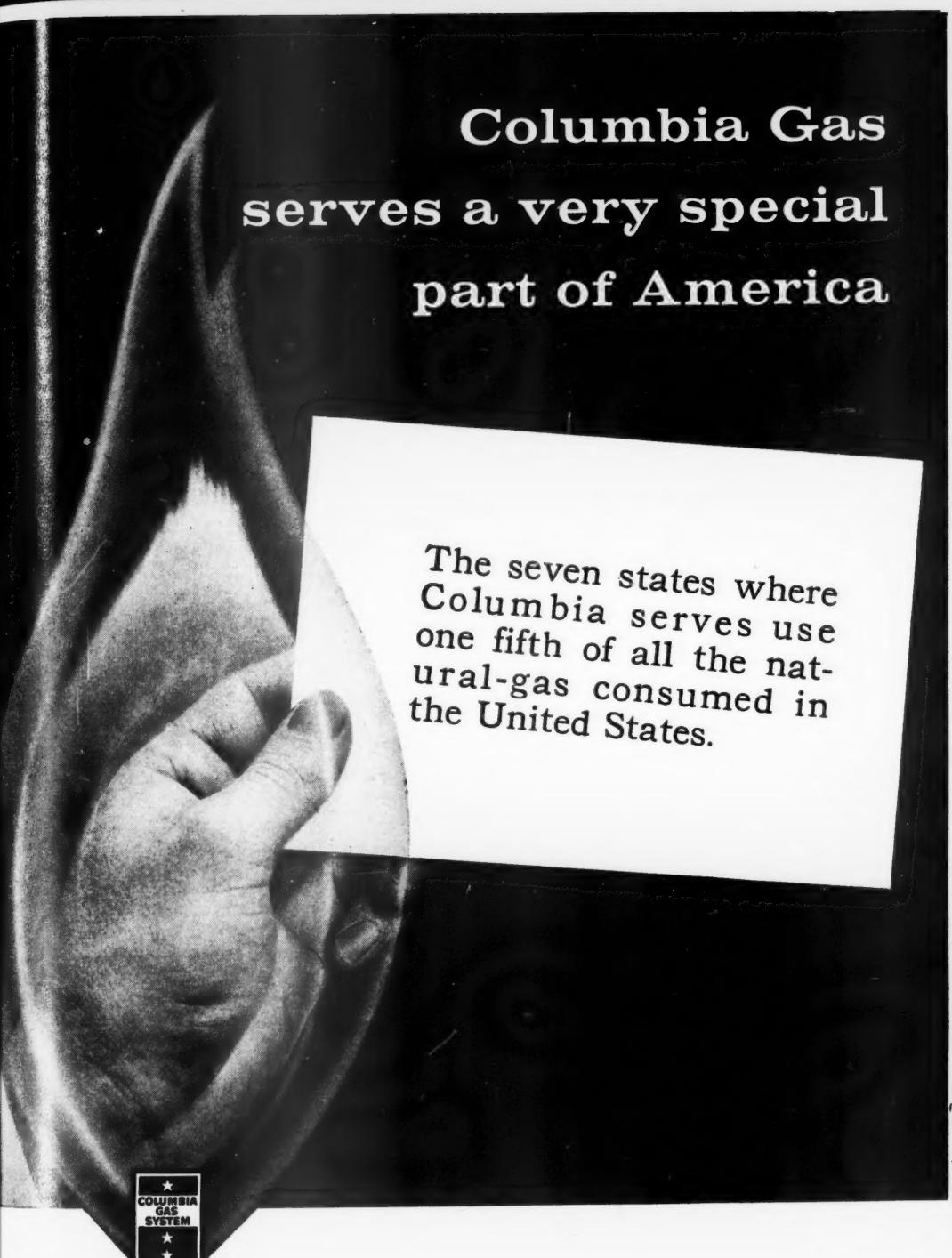
east of the Mississippi which is fortunate enough to be called satisfactory, much less affluent. The Baltimore & Ohio Railroad, dean of all the American lines, is in trouble and, in baseball parlance, is "up for grabs." The Chesapeake & Ohio wants it; and so does the New York Central, which would also like to build a three-way combination including both the B&O and the C&O. But one look at the New York Central debt was enough to dampen the enthusiasm of the Chesapeake & Ohio. New York Central is otherwise faced with the possibility of being isolated, if not surrounded, by two strong mergers involving the Baltimore & Ohio and the Chesapeake on the one hand, and the Pennsylvania Railroad and its subsidiaries on the other hand.

WHATEVER comes out of all this, there is also the brooding threat of eventual nationalization. Strangely enough, nobody seems to want this. If it comes, it will come by default, and apparently contrary to the wishes of all factions.

ARE there still workable alternatives? The opening article in this issue deals with this central problem. It comes to us from CHARLES F. PHILLIPS, JR., professor of economics at the School of Commerce and Administration, Washington and Lee University. DR. PHILLIPS is a



CHARLES F. PHILLIPS, JR.



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PAGES WITH THE EDITORS (Continued)

native of New York and a graduate of both the University of New Hampshire (AB, cum laude, '56; Phi Beta Kappa) and Harvard (PhD, '60). In addition to his number of articles on business economics, he is now teaching public utility and transportation and other business and government subjects at Washington and Lee.

ONE of the noteworthy effects of transportation policy changes and reorganization is the impact on the regulatory pattern. In Maryland, for example, a new metropolitan transit authority is authorized to take over the regulation and possibly the eventual operation of the transit facilities in Baltimore. For years, these have been under the experienced regulatory supervision of the Maryland Public Service Commission. But as the new pattern suggests a transition from regulation to operation, we see clear evidence of the old order passing. As these lines were written, plans were afoot to have the two agencies meet and confer on common problems.

* * * *

ALSO in this issue, beginning on page 99, we have an article on financial ratios in utility regulation from associate professor of finance, M. RICHARD SUSSMAN of Pennsylvania State University. He is a graduate of Ohio State University ('52) and the University of Michigan (PhD in business administra-



JAMES W. CARPENTER



ROBERT T. LIVINGSTON

tion, '60). He has worked as a security analyst for the Bankers Life and Casualty Company in Chicago and as assistant in the public utility executive training program at the University of Michigan.

* * * *

BEGINNING on page 89 of this issue, we present the third of a three-part series of articles on "Public Utilities and People" by JAMES W. CARPENTER, retired vice president of the Long Island Lighting Company, and ROBERT T. LIVINGSTON, professor of industrial and management engineering at Columbia University. This third instalment deals with utility relations inside the community. Investor-owned utility companies obviously cannot isolate themselves in the community around them. They must take a more active rôle in the future, in the view of these authors.

MESSRS. CARPENTER and LIVINGSTON suggest that some utility companies place less than enough emphasis on so-called "customer relations." They must recognize, however, that utilities are servants of the people, with responsibilities towards both the consumer and the community.

THE next number of this magazine will be out August 3rd.

The Editors

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(AUGUST 3, 1961, ISSUE)

THE ACADEMIC MAN AS REGULATORY COMMISSIONER

This is the final in a series on vocational backgrounds of regulatory commissioners by Dr. Lincoln Smith, associate professor of political science, New York University. In his previous articles, Dr. Smith had taken up the advantages and disadvantages of various vocational backgrounds, such as lawyers, engineers, accountants, and general businessmen from the standpoint of effective regulatory commission operation. This article points out the use of university professors, and other commissioners academic background is explored. The article mentions by name a number of regulatory commissioners who came to their tasks in public service via the faculty route.

CAN PREPAYMENTS ON PURCHASE CONTRACTS IMPROVE UTILITY INCOME?

Willard F. Stanley, writer of financial and economic articles in the field of public utility operations, and a resident of Brooklyn, New York, discusses the question of whether utility companies can increase their income by prepayments on equipment purchase contracts. This is a technique which has been successfully used by utilities, but some management people in the industry may not be generally aware of it. The author believes that net income can be materially increased by making partial and periodic prepayments on contracts for equipment purchases. It is because utilities are in a position to make such prepayments that these advantages are available.

THE BELL ATTACK ON PAPER WORK

Paper work is generally noticed when it comes out of the walls like termites and begins to gnaw away at profitable operations. In the Bell system it was noticed that the increasing number of telephones was being passed by the increasing number of operational and clerical employees. These curves were even in 1945 but ten years later the clerical curve was moving ahead. And so the Bell system management decided to attack the problem of increasing clerical costs on a broad frontal basis. It discovered a number of things, such as the contagious nature of "paper shuffling." Time and motion studies have been used to bring this miscreant element of skyrocketing costs under better control.

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| 1 | 1195 | 1195 | 3203 | 1195 | 753449 |
| 2 | 1649 | 3298 | 4852 | 4493 | 1505703 |
| 3 | 2083 | 6249 | 6935 | 10742 | 2226307 |
| 4 | 2377 | 9258 | 9312 | 20450 | 30187 |
| 5 | 2837 | 14185 | 12149 | 34435 | 3750 |
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KERMIT GORDON
Member, Council of Economic
Advisers.

"Men possessed of strong analytical powers—men of good will—disinterested men—will often define differently the public interest in a particular problem. How much more difficult it must be for the businessman to see the issues clearly when he stands to gain or lose from the decision."

JACK H. BERRYMAN
Columnist.

"Just as long as society will allow industry to pollute public waters and as long as the public is content to pollute its own waters and those of its neighbors, the American people will get filthy, disease-laden waters. What has become of our pride, our desire to be clean, and our public morality?"

EDITORIAL STATEMENT
The New York Times.

"The challenges besetting our economic society are too acute to permit halfheartedness in erasing doubts about its adherence to high standards of honesty and public service. This is an obligation that rests on every segment of industry, labor, and government and on each of us as an individual."

DWIGHT D. EISENHOWER
Former President of the
United States.

"[What is stolen by paternalistic government is that] compound of initiative, independence, and self-respect that distinguishes a man from a mob, a person from a number, a free man from the slave. Too much government planes off the peaks of excellence, hones down differences, dries up diversity, and leaves a bleak sameness."

DAVID SARNOFF
Chairman of the board, Radio
Corporation of America.

"Edison's message for our time, as I interpret it, is that we must work as a team, but we must not lose our sense of the uniqueness of man's genius, of the supreme value of the individual. In this lies our best safeguard against the deadly regimentation of Communism. It is our best hope for a future of peace, abundance, and freedom."

BARRY GOLDWATER
U. S. Senator from Arizona.

"It is plainly evident that the Soviet Union realizes that in technological warfare, their greatest danger will come from the continued existence of the great American industrial corporations, which alone can match and outproduce the Soviet. . . . Let us not, in the name of 'monopoly,' bring such damage to the great basis of our technical capacity, so that we, ourselves, accomplish for the Communists what they have defined as their objective."

Utilities Events Calendar

CHECK THESE DATES:

July 23-Aug. 4—Columbia University Utility Management Workshop will be conducted, Arden House, Harriman, N. Y.

July 25-Aug. 10—International Trade Fair will be held, Chicago, Ill.

July 28—Southern Gas Association will hold chief dispatchers and compressor station operations round tables, Shreveport, La.

July 30-Aug. 5—American Women in Radio and Television will hold first mid-career seminar, Syracuse, N. Y.

July 31-Aug. 4—American Management Association will present an orientation seminar, Saranac Lake, N. Y.

Aug. 1-4—Advertising Age Summer Workshop on Creativity in Advertising will be held, Chicago, Ill.

Aug. 6-8—Georgia Association of Broadcasters will hold annual summer convention, St. Simon's Island, Ga.

Aug. 7-11—American Bar Association will hold annual meeting, St. Louis, Mo.

Aug. 11-12—Texas Associated Press Broadcasters Association will hold annual meeting, Odessa, Tex.

Aug. 21-23—Alaska Telephone Association will hold annual convention, Palmer, Alaska.

Aug. 22-25—Western Electronic Show and Convention will be held, San Francisco, Cal.

Aug. 23-25—American Institute of Electrical Engineers will hold Pacific general meeting, Salt Lake City, Utah.

Aug. 25-26—Arkansas Broadcasters Association will hold fall meeting, Little Rock, Ark.

Aug. 28-30—Appalachian Gas Measurement Short Course will be held, West Virginia University, Morgantown, W. Va.

Aug. 28-Sept. 1—American Society of Mechanical Engineers will hold international heat transfer conference, University of Colorado, Boulder, Colo.

Aug. 28-Sept. 8—National Association of Railroad and Utilities Commissioners, Special Committee on the Training of Commission Personnel, will hold short course, Atlanta, Ga.

Aug. 30-Sept. 1—American Institute of Mining, Metallurgical, and Petroleum Engineers will hold third annual semiconductor conference, Los Angeles, Cal.

Sept. 6-8—Association of Illinois Electric Co-operatives will hold annual meeting, Springfield, Ill.

Sept. 6-8—Northwest Public Power Association, Power Use Section, will hold annual workshop, Forest Grove, Ore.

Sept. 10-12—Associated Traffic Clubs of America will hold annual meeting, Philadelphia, Pa.

Sept. 10-13—Rocky Mountain Electrical League will hold annual fall convention, Moran, Wyo.

Sept. 11-12—American Gas Association-Edison Electric Institute will hold joint accounting section organization meeting, Cincinnati, Ohio.

Sept. 11-12—National Rural Electric Cooperative Association, Region V, will hold meeting, Eau Claire, Wis.

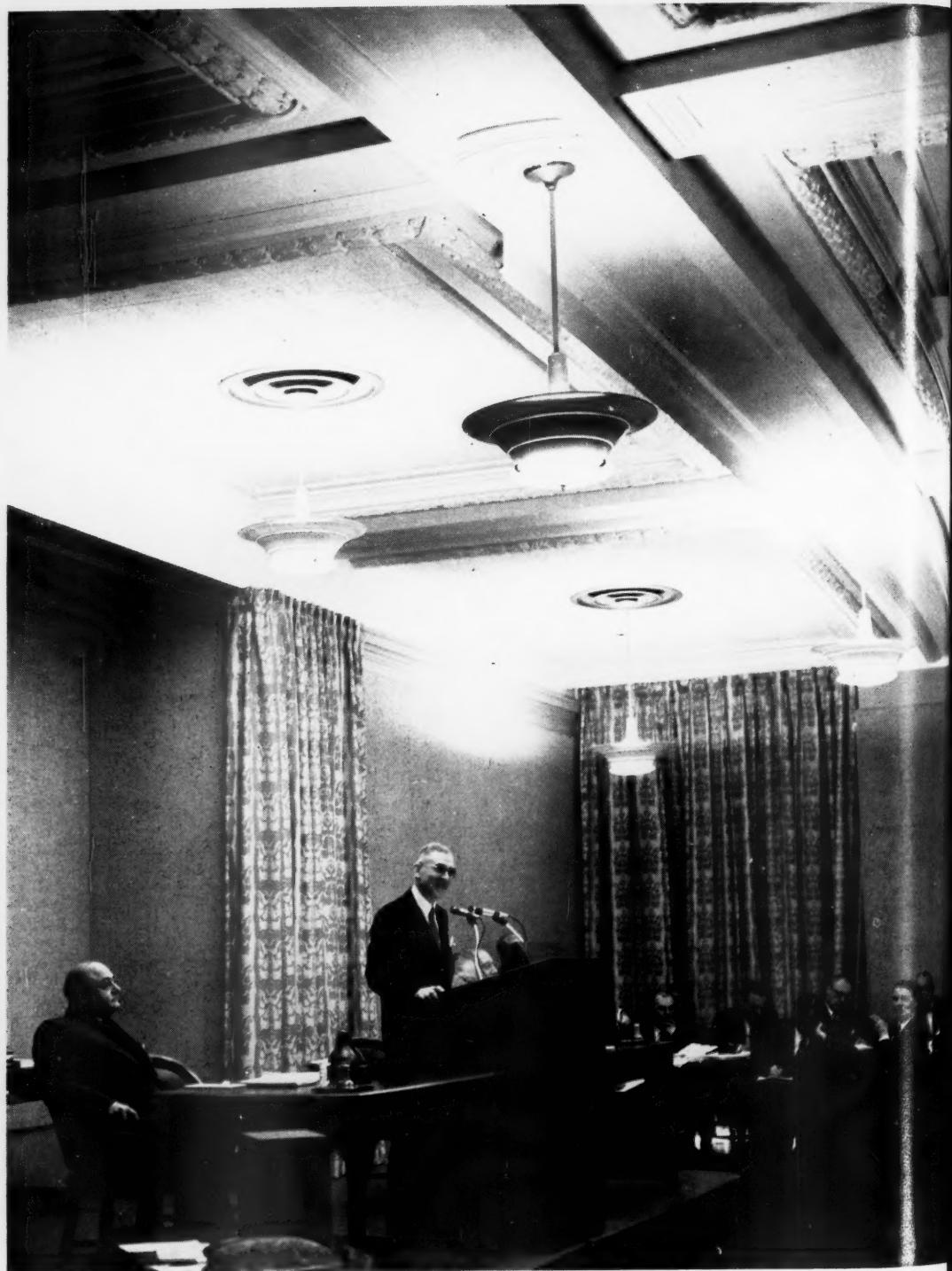
Sept. 11-13—American Water Works Association, Kentucky-Tennessee Section, will hold annual meeting, Louisville, Ky.

Sept. 11-13—Annual Accident Prevention Conference will be held, Dallas, Tex.

Sept. 11-15—Instrument Society of America will hold fall instrument-automation convention and exhibit as well as annual meeting, Los Angeles, Cal.

Sept. 11-19—International Navigation Congress will be held, Baltimore, Md.

Sept. 12-14—Mid-West Gas Association will hold school and conference, Ames, Iowa.



The Annual Meeting

In this informal photograph of the annual meeting of Consolidated Edison Company in New York city, Harland C. Forbes, chairman, is at the microphone, Charles E. Eble, president, is at the left, and the gentlemen of the press are in the background.

It is very
that railroads
economy
issued with
a manifesto
titled "No
addresses
ing authori-
America
Freedom
taxation

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Public Utilities

FORTNIGHTLY

VOLUME 68

JULY 20, 1961

NUMBER 2



The Railroads' "Four Freedoms" And Regulation

An evaluation of the four freedoms for which the railroads have asked: freedom from destructive taxation, from stifling regulation, from subsidized competition, and freedom to diversify.

By CHARLES F. PHILLIPS, JR.*

IT is well-recognized that the American railroad industry is in financial trouble. Furthermore, most would agree that railroad services are essential to our economy. On March 20th, the industry issued what many observers have termed a manifesto. In a lengthy document, entitled "Magna Carta for Transportation," addressed to "Congress and the governing authorities," the Association of American Railroads called for "Four Freedoms — freedom from destructive taxation, freedom from stifling regula-

tion, freedom from subsidized competition, and freedom to diversify."

The demands are not new. Three years ago, as a result of a sustained industry campaign, Congress enacted the Transportation Act of 1958, designed to help the railroads alleviate their acute financial distress. The act relaxed somewhat Interstate Commerce Commission control over competitive rate making, extended for the first time the authority of the commission to passenger train discontinuance cases, strengthened ICC control of intrastate rates that may burden interstate commerce, froze the list of commodities subject to the agricultural exemption, and

*Assistant professor of economics, School of Commerce and Administration, Washington and Lee University. For additional personal note, see "Pages with the Editors."

PUBLIC UTILITIES FORTNIGHTLY

authorized a temporary program of government guaranties of loans to the railroads (recently extended for another twenty-seven months). Experience in the past three years, however, clearly indicates that much more remains to be done if the railroads are to be saved.

THE recent manifesto recognizes this factor. Congress is asked to "head off a major crisis" in the industry. Whereas in 1958 the industry talked about "the deteriorating railroad situation," the phrasing now indicates a much more serious situation. "Our industry is in jeopardy," the association argues, and then warns of "the gathering storm." The plight of the railroads is blamed on "one of the worst messes Washington has ever blundered into." And the industry declares itself "tired of being the punching bag for destructive government policies."

Strong language, indeed! Just what is the current economic situation of the railroad industry? What are the basic problems facing the industry? What is the "Magna Carta" asking for? What changes or modifications in management and governmental policies are indicated? And, equally important, will the present proposals aid in the development of a better climate within which the railroad industry can profitably operate and thus make a positive contribution to the continued economic growth of the United States? The present article is a summary and evaluation of the "Magna Carta for Transportation."

The Economic Picture

IN the last fifteen years, the economic position of the railroad industry has

seriously deteriorated. The industry's rate of return on net investment averaged 3.6 per cent for the decade of the 1950's, but fell to 2.13 per cent last year; the lowest since 1938. The industry ranked at the bottom of the list of some 70 major industrial groups with respect to profit ratios, and was well under the traditional 6 per cent rate of return allowed or earned by other regulated industries. A total of 27 class I railroads, 19 of them in the East, turned in deficits for 1960.

The trends of freight and passenger traffic indicate a similar situation. Freight business amounted to 30.4 million car-loadings in 1960, down from 41.3 million in 1946 and 52.8 million in 1929. In contrast, truck loadings in 1960 were three and a half times the 1946 level and barge traffic almost doubled between those years. The railroad share of total intercity freight traffic declined from 67 per cent in 1946 to under 50 per cent in 1959; the share of commercial intercity passenger traffic from 66 per cent to about 25 per cent in the same period.

As a result of this traffic loss, net income last year of \$445 million was the lowest since 1949 and less than half of what it was in 1929 (\$897 million). Railroad employees have also felt the traffic decline: The railroads had 780,000 employees in 1960, down 43 per cent from 1946.

The Basic Problems

SEVERAL important elements are to be found in the basic problems facing the industry. In the first place, the deteriorating traffic position, outlined above, has created serious revenue, income, and capital formation problems for the railroads in the postwar period. Competition

THE RAILROADS' "FOUR FREEDOMS" AND REGULATION

from other modes of transport has advanced rapidly. In large part this can be attributed to the ability of competing agencies to render more flexible, convenient, and speedy service or to furnish service at a lower cost. Traffic has also been lost as the result of such factors as the diversification of industry (fewer long hauls) and changes in production (a compact car, for example, requires less steel, which in turn means smaller quantities of coal and limestone transported by the railroads). Excess capacity has developed in the industry, particularly in the East. The public, in general, and investors, in particular, have become pessimistic about the future of the railroads. Under such conditions, adequate capital to maintain existing equipment and to finance modernization programs is difficult to find.

Second, the railroads have been losing high-valued manufactured commodities to the trucks. The loss of this traffic has meant a more than proportionate loss of revenues because rates are high in relation to unit costs for such traffic. While a large percentage of these losses have been over short hauls, the railroads have also been losing high-valued traffic over transcontinental routes and have been losing volume in several agricultural products.

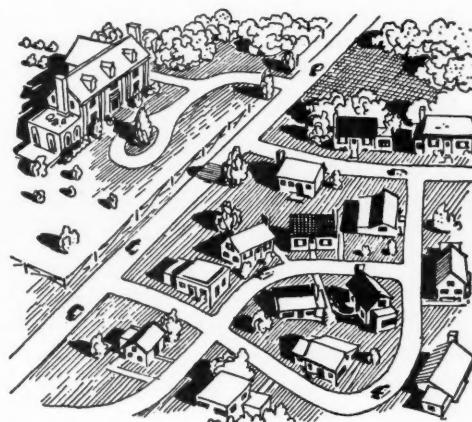
THIRD, governments have significantly affected the economic position of the industry by providing highways, waterways, airways, and airport facilities at a lower capital cost than is now available to the private railroads. Only the railroads and pipelines must maintain a heavy fixed investment in ways and pay property taxes on them. Moreover, recent studies strongly suggest that the rates

charged by carriers using public facilities do not always reflect adequate payments for their use.

Fourth, the industry continues to suffer from various featherbedding practices. In 1957, after investigating operating conditions in Canada and several European countries, a Royal Commission found unanimously that "firemen are not required on diesel locomotives on the Canadian Pacific in either freight or yard service."

The American railroads are currently paying firemen and helpers over \$250 million annually. At the present time, a presidential commission on railroad work rules is holding public hearings on proposed elimination of jobs. There is also justification for a complete re-examination of the mileage basis for computing a day's service.

FIFTH, government regulation has been another element in the decline of the railroads. All rail operations are subject to state or federal regulation, but less than one-third of truck traffic and only



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10 per cent of barge traffic are similarly controlled. Regulatory delay in postwar rate cases has cost the industry millions of dollars annually in revenues. And regulatory policies limiting rate increases to protect shippers and traditional markets have resulted in additional large revenue losses.

FINALLY, railroad management itself must share some of the responsibility for the present economic plight of the industry. Far too little has been done, until recently, in the area of competitive pricing to meet changing conditions. The industry, in other words, has hesitated to engage in vigorous competitive pricing, relying instead upon general rate increases.

Admittedly, regulatory policy has discouraged selective pricing and rate reductions. But a re-evaluation of the outdated value-of-service rate structure is urgently needed. Recent experiments with incentive and promotional rates have been encouraging, but much more can be done in this area. Piggy-back service for general freight has doubled in the last two years and the railroads seem assured of recapturing a significant portion of the new car-hauling business due to the development of the three-deck, 15-auto flatcar.

Methods must also be found to encourage shippers to load cars more fully, to release cars more promptly, and to distribute traffic so as to reduce seasonal peaks and stand-by demands. Only by undertaking extensive rate revisions to meet current competitive conditions and by making service adjustments to satisfy shipper demands, can the industry hope to recapture lost traffic.

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The Four Freedoms

WITH this brief outline of their current economic position and of the basic problems facing them, what are the railroads asking? The manifesto is entirely concerned with the type of regulation the industry faces, rather than with regulatory procedural matters. The "Four Freedoms" can be summarized under the following headings.

Freedom from destructive taxation. The industry is concerned with three tax matters:

First: Repeal the 10 per cent federal excise tax on passenger tickets. The tax was levied upon the industry (and upon air and bus riders) early in World War II to discourage unnecessary travel and to raise emergency revenue. During the fiscal year ending June 30, 1960, \$47 million was collected on rail travel. Since the end of the war, the discriminatory nature of the tax has been cited countless times. The ICC in May of 1959, for example, concluding its comprehensive study of the railroad passenger deficit problem, stated that the reasons for the imposition of the tax no longer exist. "More important, however, it is harmful to our transportation system and is highly discriminatory."

Second: Relieve railroads from the "crushing burden" of local and state property taxes. In 1960, the AAR submitted a study to the Senate Commerce Committee's special study group which showed "that \$141,187,829 in excess taxes was extracted from railroads in 1957 in 31 states solely because railroad property was assessed and valued higher than other property that was subjected to the same rates. This amounted to near-

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ly one-third of the total railroad payments in 1957 of \$441,395,977 to state and local governments." The association concludes that such a "crushing burden of a \$141 million annual penalty against an industry that is fighting for its very life is utterly indefensible and intolerable and abhorrent to one's sense of justice and fair play."

The railroads propose that Congress should pass legislation to outlaw state and local property tax discrimination as an unreasonable and unjust discrimination against, and an undue burden upon, interstate commerce. The federal district courts should also be given the right to issue injunctions barring such discrimination.

THIRD: Modernize federal tax policies relating to depreciation to stimulate new investment for improved rail plant and facilities. The railroad industry has spent more than \$16 billion since 1946

for capital facilities, but this amount was half as much as the industry's entire net income for the same period. And even this amount, executives claim, must be increased to \$1.5 billion a year if modernization is to be adequate. Under present tax laws, the average overall annual rate of depreciation for the railroad industry is under 3 per cent. "With inadequate operating earnings, inability to resort to the stock market for equity financing of capital investment, equipment trust financing becoming increasingly costly, and relatively little cash available from depreciation charges, relief in some form must come." The problem, the association continues, is compounded by the fact that competing modes of transportation are afforded much more liberal depreciation allowances.

Two suggestions toward this end are made. First, at the election of the corporate taxpayer the maximum useful

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life of depreciable railroad property be shortened for tax purposes to fifteen years in the case of rolling stock and to twenty years in the case of other property. No more than the cost of the property, less salvage, is to be recovered through depreciation charges. Second, the railroads should be allowed to establish a "construction reserve plan" which would enable the lines to set aside a tax deductible reserve under rules and regulations to be prescribed jointly by the Secretary of the Treasury and the ICC. Such a fund could be spent within five years only for buying equipment and other property used in transportation or for the reduction of debt incurred in connection with such acquisitions. The plan would grant the railroads tax deferment in depreciating investment, and not tax forgiveness.

FREEDOM FROM STIFLING REGULATION. Here the industry is concerned with two "incredible inequalities" in the regulatory policies governing the various modes of transportation:

Either repeal the exemption from regulation now given trucks when hauling agricultural commodities, or extend this same freedom to railroads. Under Part II of the Interstate Commerce Act, motor carriers carrying agricultural and horticultural commodities and fish are exempt from economic regulation. As a result of this exemption, plus the growth of private and contract carriers, nearly two-thirds of all motor vehicle traffic is exempt from rate regulation.

Either repeal the exemption from regulation now given barge lines when hauling commodities in bulk, or extend this same freedom to railroads. Under Part III of the Interstate Commerce Act, when

the cargo space of a vessel in which such commodities are transported is being used for the carrying of not more than three such commodities, they are exempt from regulation. Today, 90 per cent of barge traffic is thus exempt.

IN contrast, when either agricultural or bulk commodities are transported by the railroads, they must move at ICC regulated rates. A 30-day published notice must be made before a railroad rate can be changed, and this usually is preceded by an investigation and commission hearings. In the words of the association:

The railroads are like a man operating a corner store who is required to write his prices in large letters on his store window, who is prevented from deviating from them, and whose prices must meet certain statutory standards —while his competitor on the opposite street corner operates under no such compulsion and has only to come across the street and read the posted prices to know what he should charge to attract the business . . . and who is free to charge whatever he pleases whenever he pleases, to that end.

For many years the industry has urged Congress to extend these same exemptions to the railroads. In response, the Transportation Act of 1958 froze the broad list of commodities coming within the agricultural exemption, but made no other changes. Now the industry is demanding either repeal of the exemptions or their extension to the roads.

FREEDOM FROM SUBSIDIZED COMPETITION. All units of government have

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spent an estimated \$162 billion of public funds to provide inland waterways, highways, airways, and airports that are used by commercial transportation for private profit. More than one-third of this investment has been spent since 1955. Of the transportation agencies, only the railroads and pipelines must pay for the acquisition, building, and maintenance of their own rights of way and pay taxes on them. Water carriers are not required to pay tolls except on the St. Lawrence seaway. The only contribution of the air-line industry toward federal airway costs is the excise tax on aviation gasoline. And there is much doubt that highway user fees are sufficient for some types of high-mileage heavy vehicles. Moreover, public ways are tax-exempt, while the railroads pay property taxes of more than \$200 million annually on their roadways. Motor carriers, of course, pay other general taxes, such as the excise taxes on vehicles.

The association argues:

Where tax money is spent to build and maintain air, water, and highway facilities, adequate charges should be assessed by government against commercial interests using these public facilities for private profit.

FREEDOM TO DIVERSIFY. Under present laws, railroads can own pipelines, but there are severe restrictions on their ownership of trucks. They are barred from the air-line business. For many years it has been assumed that they were also barred from owning barge lines, but this point is now being tested before the ICC.

The industry argues that it is now prevented from offering shippers "one-

package" transportation. The final proposal of the industry, therefore, is:

Grant railroads the same opportunity others have to use the highways, waterways, and air facilities which rail taxes help provide, thus giving all carriers the freedom to diversify their services.

The Goals: Economy and Neutrality

ANY evaluation of the railroads' proposals must be made against the background of general standards or objectives for our transportation system. In recent years much has been written about the need of developing a national transportation policy: a unified, consistent, and co-ordinated group of policies on transportation. Each form of transport, in other words, would be fitted into its proper place in the system to promote the efficient allocation of resources, further carrier development, and the needs of national defense.

That the United States lacks such a policy is only too evident. The various modes of transportation are not treated alike under the policies of state and federal governments. Each form of transportation developed at a different time. Each was brought under regulation in a different period and for reasons specific to that period. And each policy has evolved under the guidance of powerful organized interest groups. The achieve-



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ment of a national transportation system, therefore, requires a complete reconsideration of existing policies.

THE basic requirements for a national transportation policy are easily stated. Public policy should aim to develop a transportation system that is strong, economical, efficient, and financially stable. Each mode of transportation should carry that portion of the traffic that it can best serve at the lowest total resource cost. To achieve these goals, regulatory policies must be neutral between competing carriers. No agency should get unfair advantage through promotion, user charge, subsidy, taxation, or economic regulation. Moreover, regulatory policies should be continuously studied to make sure that they are not only neutral, but also of the right type to meet current economic conditions. The basic requirements for a truly national transportation policy, therefore, are (a) economic efficiency and (b) government neutrality toward competing carriers.

Most of the proposals found in the "Magna Carta for Transportation" would be a step toward these goals. All, however, are highly controversial.

Evaluation: Taxes

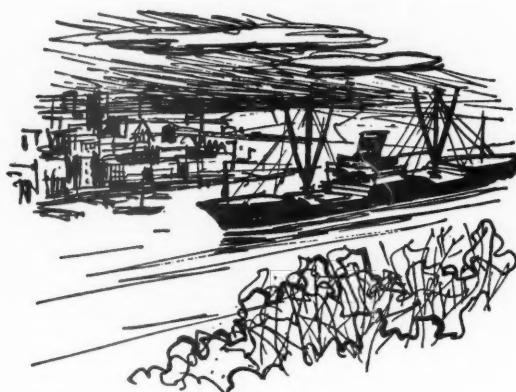
THE case for repeal of the 10 per cent federal excise tax on passenger fares is strong. The tax, which applies to common carriers but not to private carriers, has long been recognized as discriminatory. As a recent statement concludes: "Here is a tax that no one—no government agency, no private individual, no area—has testified is good, fair, or beneficial." In 1958 Congress repealed the 3 per cent excise tax on freight carried by

for-hire carriers, thus promoting neutrality among competing carriers. The result would be the same if the tax on passenger fares was removed.

Are the railroads exaggerating the extent of local and state tax discrimination? Perhaps not, as recent litigation indicates. To illustrate: Three railroads won litigated cases in opinions handed down by the Nebraska state supreme court on March 18, 1960. In each case the railroad's assessment was reduced so as to reflect an assessment ratio in proportion to full value at the same level as that of property generally. In California, several court suits were filed by railroads in 1959 to recover overpayments. The roads contended that the California Board of Equalization had assessed all railroad and utility property, both operating and non-operating, at 50 per cent of full cash value, while the statewide average of all other property—including that of truck lines—was assessed by county assessors at 23.7 per cent of full cash value. The suits were voluntarily dismissed after the state board agreed to gradually reduce future assessment ratios over a period of years and after the legislature had adopted a statute providing for continuing study and publicizing by the board of local assessment ratios.

LITIGATION in some states has been successful; in others unsuccessful. As a method of obtaining equal assessments, however, it is slow and costly. Moreover, for the railroads as a whole, the costs may be greater than the gains. The real difficulty, of course, is that the \$400 million paid to local and state governments in property and other taxes represents a significant portion of their annual

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revenues. Particularly is this true at the local level. The fear of losing revenue is the leading explanation behind much of the present opposition to railroad mergers. And the state of Arkansas recently passed a law stating that railroads abandoning all or most of their operations in the state will be subject to a special "removal" tax on the value of their properties given up in the state.

GIVEN (a) the existence of discriminatory taxation, (b) the reluctance of local and state assessors to make equalization adjustments, and (c) the length and cost of court action, federal intervention in this area is required. Similar circumstances led to the extension of ICC authority to passenger train discontinuance cases in 1958. In a majority of the states there seems to be little prospect for voluntary action. Furthermore, in a few states, bills have been introduced to place the railroads in a class where they could be assessed on a basis different from that of other property. With these pressures existing, the Senate Commerce Committee's special study group recently recom-

mended federal legislation to eliminate local and state discriminatory taxation.

THE industry's proposal for larger depreciation allowances, to encourage investment in plant and equipment, is one which concerns all American industry. Business in the United States is burdened with perhaps the most backward and archaic depreciation tax policies in the world. In sharp contrast stand Europe and Canada, with more modern and realistic policies. Moreover, firms in these foreign countries are providing growing competition for American companies both in domestic and foreign markets.

We are operating under a depreciation system which is nearly twenty years old; the last major revision having been made in 1942. Economic conditions today are vastly different from what they were twenty, fifteen, or even five years ago. The current depreciation system is largely based upon *physical* obsolescence, but in 1961 the problem is *technical* obsolescence. As a result, the average age of equipment in use has been increasing, and recent estimates indicate that the costs

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of replacement are outrunning depreciation allowances by \$5 to \$8 billion a year. A McGraw-Hill survey states that the costs of replacing facilities that are presently obsolete would amount to nearly \$95 billion. And the rate of obsolescence is expected to increase in coming years.

FEW would argue against the proposition that tax policies are critically important to the economic strength and growth of any country. At the same time, if accelerated depreciation has obvious advantages, why has the United States been lagging in this area? The long-standing and often-voiced argument against faster write-offs has been that the government would lose revenue. Perhaps there would be a loss in the first year or two, but over a longer period a company can deduct only 100 per cent of its investment. Moreover, if higher depreciation rates encourage new machines which in turn earn higher profit rates, the government's total receipts from taxes might increase at once. Only if machines earn no more than before and are merely replaced at a faster rate, will the government permanently lose revenue.

No special depreciation allowances should be enacted for the railroad industry. Rather, it is hoped that Congress will modernize depreciation policies for all American industry, including the railroads. Only this latter is consistent with the industry's demand for equal treatment.

Evaluation: Exemptions

FROM an efficiency point of view, the various modes of transportation should be allowed to operate as competitive enterprises. The market place, and not a

commission, should allocate traffic among the agencies. These goals are impossible, however, unless the advantages of low-cost carriers are reflected in their rates and unless active price competition is permitted.

Governmental neutrality and market allocation of traffic both require that the railroads' proposals to either repeal present exemptions granted to truck and barge carriers, or to extend them to the railroads, be granted. The exemption of bulk cargoes, for example, was originally based on the belief that such transportation was not competitive with railroads or motor carriers. Moreover, it was also the result of compromise in an effort to reduce opposition to the enactment of federal regulatory legislation. Today, however, these three modes do compete for the bulk (and agricultural) commodities, and the barge exemption places the regulated carriers at a competitive disadvantage. Unless repealed or extended to other carriers, traffic allocation of these commodities will continue to be made upon "political" considerations.

THE railroads urge repeal or extension of present exemptions, and action is needed, but this is only one important element in the traffic allocation problem facing the transportation industry. The whole concept of regulatory rate policy needs review. In 1955, the principal conclusion of the Weeks Committee report was that, with some exceptions, the transportation industry has become highly competitive and that this fact must dominate regulatory policy if the public interest is to be served.

The committee claimed that, as a result of failure to adjust regulation to permit

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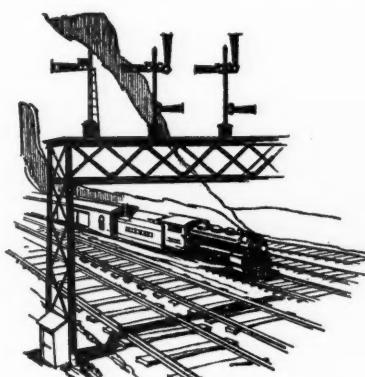
competitive forces to operate more fully and equally, regulatory policy itself had been an important factor in preventing achievement of the most economical distribution of traffic. "The consequent loss to the public, while incapable of exact estimate, is believed to amount to billions of dollars per year . . ." The conclusion was "that adjustment of regulatory programs and policies to . . . competitive facts is long overdue."

THE committee proposed a new declaration of transport policy, placing emphasis upon competition and freedom for low-cost carriers to compete effectively for traffic. The central idea, therefore, is that no agency can determine the economically right sphere for each type of carrier. This must be determined in the market. To carry out this declaration, the railroads must be given greater freedom in setting rates.

The committee argued that the authority of the ICC should be confined to approving "reasonable" maximum and minimum rates in order to prevent undue discrimination. The maximum rates would be at least equal to full costs, and would be held to be a reasonable limit for noncompetitive traffic. Minimum rates would be at least as high as variable costs (out-of-pocket costs), and would be designed to attract business to the railroads. All other carriers, of course, would be treated in the same manner. These proposals are designed to reduce interference by the ICC with rate cutting, to the end that the commission would become "an adjudicator, not a business manager." Although the relaxation of competitive rate control authorized by the Transportation Act of 1958 was a step in this

direction, further revision of the Interstate Commerce Act is needed to restore rate regulation to its proper rôle.

No implication has been intended that all rate regulation should be abolished. On the contrary, such regulation is still needed despite the present competitive conditions in transportation. Discrimination must be controlled so that rates are not designed to deliberately destroy competition, or to give undue preference to large shippers. Congress must, however, repeal the National Transportation Policy (1940) in its present form. References to encouragement of reasonable charges "without . . . unfair or destructive competitive practices" and to fostering "sound economic conditions in transportation and among the several carriers" must be eliminated. Far too often have these statements been construed to justify restriction of rate and service competition even when based on the actual unit costs of low-cost carriers. The low-cost carrier must not be limited in rate competition with other carriers.



Evaluation: Subsidies

IN a careful study of transportation policies, Dearing and Owen of the Brookings Institution argue that billions of dollars of subsidies that the federal government has poured into transportation facilities and services have not been spent wisely from the point of view of the transportation system as a whole. Subsidies have aided only parts of the system. Are they the parts that should have been expanded? Have highway and waterway capacities been expanded by the right amounts? Have benefits and costs of the expansion programs been carefully matched and compared? To these and related questions, the authors answer no. Tax money has been spent on more transportation, but without a general plan and without broad criteria.

Closely related is the problem of user charges. Economic efficiency requires that prices equal long-run out-of-pocket costs of service. Put another way, unless this criterion is used as the standard in setting prices, the allocation of resources in transportation is uneconomic. Only if the charges imposed upon users cover the full costs of the publicly provided services is economic efficiency achieved.

THE problem is compounded by the fact that railroads and pipelines must maintain their ways and pay taxes on them. User charges, therefore, should also cover the property taxes that would have to be paid if public ways and terminals were operated as private facilities. Either this, or perhaps offsetting federal or local payments might be given to the railroads and pipelines for the property taxes they pay on their ways. This is needed if the goals of economic efficiency

and government neutrality are to be obtained.

No attempt will be made to undertake a lengthy discussion of the user fee controversy in the present article. It should be noted again, however, that the goals of efficiency and neutrality require that all transportation prices cover the full costs of services provided at public expense. Such is not the present situation, thereby resulting in discrimination among competing carriers. Furthermore, if full user charges were to be imposed, gradual increases might be desirable. That would minimize any sudden price increases for carrier services and would minimize any competitive repercussions among the various modes of transportation.

Evaluation: Diversification

THE final proposal of the industry deals with diversification. Here, the public interest is concerned with the extent to which a more efficient performance can be secured by joining several modes of transportation together in the rendering of service. Historically, public policy has sought the development of each form of transportation separately and has prevented the integration of several modes through common ownership. As a recent report explains:

The earlier dominance of the railroad and the fear that railroads, because of their maturity, size, and financial resources would necessarily become the moving parties in integration by ownership has much to do with explaining present legal bars to entry into one form of transportation by another. For such fears go along with the expectation that railroads, if per-

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mitted to control other forms, would tend to subject them to the interests of the railroad enterprise itself.

IN the past it has not been unusual for carriers of one type to refuse to establish through and joint rates with carriers of another type. At one time the railroads which are members of the AAR had an agreement not to establish such rates with motor carriers; an agreement which was attacked by the Department of Justice as a violation of the Sherman Act and which ended in a consent decree. Other examples could be given to clearly indicate that the various types of carriers have not shown a spirit of co-operation. Moreover, the ICC has no authority to require the establishment of through and joint rates involving railroads and motor carriers, or motor carriers and water carriers.

The importance of the last two paragraphs is not historical. Often, the opponents of transport diversification use one or both as justification for the present policy of maintaining separate ownership of the different types of carriers. This is unfortunate. Whatever the past conditions were for railroad dominance

and whatever the motives were for the lack of co-operation among the various carriers, they have no relevance in the present. The requirement today is efficiency. Governmental policy must change to meet new conditions. Many situations currently exist where common ownership and control would result in a lower cost of service from shipper through to consignee than can be obtained when a single form of transport undertakes, or when two modes co-operate on, the complete job.

THE Mueller Committee, after investigating the question of diversification, reached the following conclusions:

Yet it may often be the case that more expeditious and effective results will occur if a degree of flexibility is accorded to each transport technology to cross the line into others under common ownership and control. Hence rigid statutory bars may be unwise. The risks that a dominant position may be secured and that competitive carriers may be destroyed without economic warrant must, however, be held carefully in view. Thus it would ap-

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pear desirable to permit entry of one form into another, or acquisition of a carrier of one type by a carrier of another type, when it can be shown that a service of superior value or efficiency can thereby be created.

WITH respect to the establishment of through and joint rates, the committee concludes:

At most the power to require different modes to form through routes and establish joint rates would seem to be advisable for exercise only where a compelling public interest can be shown. The attitude of the law should be to encourage and facilitate rather than to compel such arrangements.

Such policies would serve not only the goal of efficiency, but also of neutrality. In addition, greater freedom of entry for new carriers could be an important safeguard against the development of substantial monopoly control over any particular route. There is also the constant threat of private carriers to act as a regulating force. The public interest can best be served by the adoption of a more flexible attitude toward transportation diversification.

The Outlook

Is there any chance that the proposals of the railroad industry will be adopted? The present writer is doubtful that Congress will enact many of them during the current session. The plea for removal of the 10 per cent federal excise tax has failed in the past because Congress has been unwilling to give up the revenue. The same taxes were ex-

tended on July 1, 1961. If the industry can ever win the full support of the administration, there is perhaps a slim hope of future repeal or reduction. While the ICC will undoubtedly back the industry on the matter of discriminatory local and state property taxes, the states will vigorously oppose it. Such opposition will put great pressure upon Congress to adopt a "hands off" policy. Litigation, despite its limitations, appears to be the only way in which the industry will obtain immediate equal assessments. And while the President and several members of Congress have indicated that some revisions must be made in present depreciation policies for all American industry, most feel that no major changes are likely before 1962.

Nor are there any indications that the present agricultural and bulk commodity exemptions will be either repealed or extended to the railroads. Congress specifically has exempted these from rate regulation. While the list of agricultural products has been frozen, Congress showed no willingness just three years ago to make any basic changes in policy. Private shippers will clearly fight any railroad move to extend ICC regulation to them, and truck and barge interests would surely oppose any railroad move either to share in the agricultural and bulk commodities shipments or to have their rates regulated.

PRESIDENT Kennedy, but not Congress, has already acted upon one of the proposals; namely, to assess user charges in the form of higher operating taxes on trucks that use highways built with federal aid. While the President's stated

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objective is to raise more highway construction money rather than to help the railroads, many influential members of Congress have spoken in opposition. The administration has also asked for studies of user charges for other federally aided facilities. Any such charges, however, would face a long battle in Congress, especially since similar proposals in the Truman and Eisenhower administrations got nowhere. There is wide disagreement over how user charges should be assessed and this factor seems to rule out immediate action.

Finally, doubt must also be expressed that congressional approval can be obtained immediately on the railroads' diversification proposal. Several bills to permit transport diversification have been introduced in Congress in the past, without success. To be sure, the recent approval of the proposal by the Senate Commerce Committee's special study group is encouraging. Yet it seems unrealistic to expect congressional action this year.

THE author hopes that this pessimistic outlook for prompt congressional action is wrong. If the railroads could win the strong support of President Kennedy, the ICC, and the public, Congress might well be persuaded to enact some of their proposals. Certainly the present economic situation of the industry justifies such support and action. And it cannot be stressed too strongly that the railroad industry is not seeking subsidy. Instead, it is only asking for two things: up-to-date regulation and equal treatment. Few would argue that these are unreasonable requests. On the contrary, it would seem that the industry has the right to expect both.

Conclusions

IN 1887 Congress enacted the Interstate Commerce Commission Act to regulate the railroads. At that time, the industry had a virtual monopoly of transportation in the country and was guilty of many corrupt and highly discriminatory practices.

Over the years, however, other modes of transport have developed and have grown, aided in large part by various government promotional activities. During this time, while competition in the transportation industry has increased dramatically, regulation has also expanded. To continue to regulate the railroad industry as a monopoly is detrimental to the public interest. This problem was recognized by the Senate Committee on Interstate and Foreign Commerce three years ago, when it observed: "The federal government through the Interstate Commerce Commission, and the vast majority of the 48 states through state regulatory agencies, supervise and dictate to the railroads, usually under laws and procedures that are ancient and outmoded."

Today, it is not being overdramatic to say that the railroad industry is fighting



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for its very existence. The country is faced with an important decision: Should the American railroads continue under private ownership or should they be nationalized? If, as the author hopes, the answer is private ownership, then Congress and state legislatures must act promptly. The industry has often been criticized in the past for its lack of imagination and initiative in making constructive proposals to meet new competitive conditions. Perhaps such criticism has been partly deserved, but regulatory barriers have not encouraged needed adjustments and have handicapped the industry in numerous ways.

THIS leads to one final consideration: The United States has not solved the problem of government regulation of private business. Regulation is inherently slower than competition. At the same time, it often supplants the judgment of an agency for that of industry management. For these reasons, regulation is both difficult and complex.

These limitations can be minimized, however, if regulation is kept up to date. Competitive conditions are not static, but are continuously changing. The type of regulation that was needed yesterday, may not be needed today or tomorrow. Too much regulation, and regulation of the

wrong kind, combined with the inherent limitations, can be damaging to all parties concerned.

Regulation is needed primarily to protect the public against monopoly abuses. As competition in the market grows, regulation should shrink. With respect to the railroad industry, the Mueller report stated:

The tighter regulation that was well adapted to protecting the public under the predominant monopoly of the railroads is no longer well suited to highly competitive transport networks. Common carrier rates of all kinds are rapidly becoming regulated by competition whether the common carriers like it or not. . . .

This is the important public policy issue that is indicated by the current situation of the railroads.

CONSTRUCTIVE action is urgently needed if the private railroad industry is to survive and, of even more importance, to fulfill its significant rôle in the American economy. The railroad problem, however, is but one aspect of the broader problem of how transportation as a whole can be improved, so as to render greater efficiency at lower rates.

"AS common carriers wither and die, on the same street, healthy unregulated carriers of all modes flourish in the sunshine and fresh air of nonregulation.

"Each mode is limited to a monopolistic pattern which excludes common carriers of another mode and each uses up much of its substance in an attempt to gain volume in its own mode. Yet actually, its ruinous competition comes from the unregulated carriers of all modes."

—ALFRED E. PERLMAN
President, New York Central Railroad.

Public Utilities and People— *Inside the Community*



Utilities must take a more active rôle in community and national happenings. It is unfortunate so many companies place little or no emphasis on so-called "customer relations." Utilities should recognize they are servants of the people and always keep in mind their consumer and community responsibilities.

By JAMES W. CARPENTER and
ROBERT T. LIVINGSTON*

THE American private enterprise utility companies are one up on Sir James M. Barrie's "*The Admirable Crichton*" because they don't have to be ship wrecked as he was on a lonesome island to have a full share in community life. As they provide day-to-day service of electricity, gas, telephone, or water supply, they are distinctly in the servant class and their letter of reference is determined by the completeness, reliability, and thor-

oughness of every element of their work. Beyond this rôle of faithful retainer, however, each company has a distinct character, it may be just as a participant, but it can be as a leader, in the affairs of its locality as in the state and nation.

Depending upon management viewpoint this sharing may be trivial or it may be tremendous. There are some companies that place little or no emphasis upon anything but the day-to-day deliveries and long-term technical planning of their franchise chore. To such, the mechanical phases of their operations are the extent

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of their interest in the affairs of the community. They seek to fulfill completely the part of a servant; they hope for the going wage and they are content with their routine life.

To others there is full recognition that today's challenge to the American corporation is the sharing in the constant search for a sound economy, a steady growth and general prosperity for all who reside in their territory. Such a company realizes fully that it must become an entity in the ecology of human affairs if it is to maintain its right to live honorably and to have a part in the advancement of a dynamic America. In such a course the company is not merely a servant but rather a responsible and harmonious neighbor in the life of the village, town, or city. While there may be competition among sectors of the territory it is not destructive, rather it is like that of the Twin Cities, Minneapolis and St. Paul, striving always for the best overall results.

In these endeavors by utilities the fields of customer relations and community relations are not separated by stone walls or picket fences. It may be difficult to define the stopping point of one function and the start of the other but there need be no confusion over the objective: to cultivate good will among people both as customers and as members of the community. The problem is to keep the goal always in mind rather than to be concerned about the plowing of any common zone.

Co-operation with Government

In the major areas of society there are several vital functions that are of great concern to the alert utility company. Government, from the local to the national

level, is surely one of these. The corporation may have been begotten by its original shareholders but it is a foster child of the state which gave it bodily status through a charter and from time to time enlarges or restricts its field of activity by the issuance of franchises, licenses, and permits. It is thus of first concern to the company to remain on good terms with government because inspections are frequent and franchises are renewable. Moreover, the public service rendered is often to municipal or other authority and contracts are neither automatic nor perpetual. The confidence of public officials is vital for fair terms on power, street lighting, telephone service, gas heating, or water supply either as new business, replacement, or enlargement.

In addition, a very necessary activity is to keep government men in a reasonable, or at least neutral, state of mind by the certainty that they are not inflicted with public complaints about the company. Hence the regular and frequent contact of the utility man with authorities both in their offices and in open meetings is essential. In times of peace prepare for war; the utility man who is a regular attendant at board of supervisors, city council, or commission meetings soon establishes a relationship that pleases the members and frequently protects a company's interest by action on subjects in either a positive or negative way at their first mention. A mayor is only human and it eases his duties when he has a chance at a public meeting to refer some taxpayer protesting about the doings of a utility company to its representative right in that session. Not only does it take the load off his shoulders but also it frequently eases

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quickly some complaint or misunderstanding. To the utility company it may mean a chance to clear out a brush flame before it flares into a field fire.

CLOSE attention to local government pays off, particularly when a company proposes construction or rebuilding on land that must be rezoned. Often this will test severely the work of years in creating friendly feelings among people, particularly those who live or own property near the new project. It takes careful planning, creation of public interest and support, adequate defense against opposing attacks, and real overall salesmanship in securing municipal approval. It is a mistake to believe that most applications of this character will get immediate approval just because a proper application is filed, a newspaper ad is run, and a casual appearance is made at a public hearing or meeting.

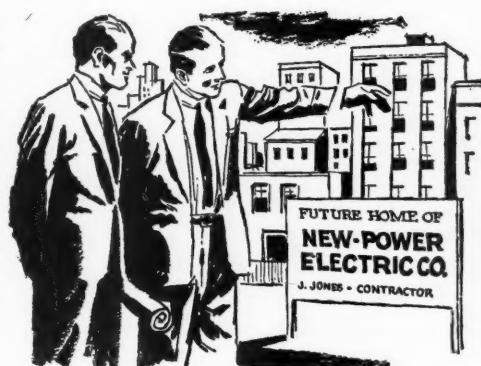
Most utility zoning problems revolve around the location of a new power plant, gasholder, electric substation, water-pumping unit or tank, railroad siding, electric or telephone pole line, or storage yard. Despite the advantages to the area generally and the improved service to the community at large, there will be some people with direct personal interests or an ingrown dislike of utilities who are just not going to like the change. The objectors will cry "put it somewhere else" and without a very positive showing that this spot is the one and only, they are apt to prevail. It is too often the case that local zoning bodies or governmental boards give way to the loud cries of even a minority of residents, taxpayers and voters as they are, rather than to follow their own judgment on overall public benefits. Prac-

tice, however, makes perfect and a few experiences soon school the utility organizations in the most effective measures to advance their cause.

Informing the Consumer

VERY cautious and deliberate course by the company is indicated. It is usually wise to acquaint the governing body fully in a preliminary session of the detailed plan, the purposes of the construction or use of the property, the need and the resulting benefits. The place to start public support is in the sections remote from the proposed site. There is a constructive and attractive story to give these folks about the benefits of the project, such as more service, better service, added employment, lower rates, and an addition to the tax base that means less taxes, or avoidance of tax increases to them because the added income to the municipality can be used for new roads, schoolhouses, public buildings, or other undertakings.

On this foundation it is now worth trying to build as pleasing a front as possible for the neighbors of the property under discussion and to soften in some measure



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their natural objections. Photographs, in color if available, of new, similar installations at other places, layouts of proposed landscaping, the opinions of public officials in other areas where like projects have been completed, all help to build the positive case.

PREPAREDNESS must also be made for talks at public meetings that will inevitably occur and company witnesses must be ready to testify at official hearings or court actions. For both of these tasks skills must be developed in the company people who are called upon to handle them, and the officials involved must seek every chance to train and test themselves. Testimony presentation is now a regular stint in the work of most executives as they are called upon to appear in federal or state commission hearings, court cases, legislative or congressional investigations and committee sessions on proposed laws.

Those who have not had experience of this character should be trained to testify by practice in mock trials, including severe cross-examination by counsel and others and to learn that it is far wiser to answer "I don't know" than to satisfy impulse or ego by attempting to advance answers on subjects not thoroughly known. Otherwise, a tentative act of bravery or rashness may lead to a debacle before a shrewd cross-examiner.

UUTILITIES are also vitally concerned with local government's viewpoint and action when higher tariffs must be sought from state or federal regulatory bodies. Paradise to the rate man is a place where prices are fixed automatically on the basis of an agreed property value including plenty of overheads, a rate of re-

turn that has latitude for contingencies, and operating costs that are never questioned.

Unfortunately for him, we live in a more prosaic world where nobody likes to have his expenses go up and the advocates of the public weal are infinite. It is under such conditions that the utility which seeks to be only a mechanical provider of service finds violent objections to any raising of its rates. On the other hand, the company that has told its story to its local governments over the years can expect either no opposition to its petition or at least objections which are factual rather than factious.

Like Mr. Dooley's Supreme Court, the regulating commissions are human enough to recognize the angles of public flags they see through their periscopes focused on local reaction. The costs of year-round community relations work are minor compared to those of valuation experts, land appraisers, and lawyers engaged in a protracted rate case.

Community Participation

ONLY a step beyond the relations of utilities with government is their participation in public policy. Call it maintenance of the American enterprise system, protection of the property, resistance to Socialism, or plain politics, the present necessity for privately owned public service companies, as well as business generally, the professions, and property owners at large, is to unite in vigorous counteroffensive against the persistent socialization of our country. Any calm comparison of individual and corporate freedom of today with that of fifty years ago can lead only to the conclusion that acceptance, appeasement, retreat have already

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been used too much. T. Roosevelt made more yardage toward peace with the Big Stick than Neville Chamberlain did with the umbrella.

The time has come again for the voices of industry leaders to sound the trumpets and they must also lead the charge. No penny politicians misunderstood the late Henry L. Doherty when he was reputed to have told an Ohio city council that his trolley line was not a convenient fireplug comfort station for every passing mutt. He hauled the streetcars across the state line until he got reasonable treatment. Every one who was present at the Edison Institute luncheon in the Waldorf Astoria some twenty-five years ago never forgot old Tom McCarter's speech. He opened with a story that turned pink the ears of the ladies present but he ended with a battle cry that brought his audience to their feet, "It is time to stand up and be counted."

THE aloofness of the American businessman, including the utility company supervisor, administrator, and executive, from the fray of practical govern-

ment is one of the depressing features of present-day affairs. Moreover, his silence and lack of knowledge make it easy indeed for his opposition to gain its way. There is never any question about any advocate of Socialism or Communism—he knows his stuff and is prepared to meet all comers. The protagonist of government ownership can convince the uninformed by the thoroughness with which he presses his case. Even in such projects as the three-man panels on labor-management disputes during World War II the labor members knew their business, urged their arguments, and showed sound schooling in their preparation while the management performance was generally a display of patriotism rather than knowledge of labor economics.

THERE is far too little support of state legislators and members of Congress by the people in business. The representative in Washington may appreciate the opportunity to play golf with Mr. Utility but what he would really like is some strong local area support and praise when he finds that he can conscientiously vote

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favorably for the private enterprise system. If we are to maintain the remnants of that way of life which we still possess, it is to be done by exchanging the inherited adherence to any political party for the articulate expression and support of principles. As McCarter said, it is time again for a count before we hear the count down.

Responsibility to Community

BEYOND the political realm there is an equally important community responsibility on utility companies and their managements in full participation in the direction, footwork, and financing of chambers of commerce, community associations, planning bodies, and civic service units. Just to cite a few of the present opportunities we mention the following:

1. A company of speakers, musical programs, apparatus and appliance demonstrations, slide film and moving picture presentations, and employee dramatic offerings.
2. Expositions, industrial shows, historical pageants, county fairs, home show.
3. A continuous program through addresses, pamphlets, and advertisements, and other educational outlets on the meaning of Americanism.
4. Open house and inspection trips over company properties for students and groups of teachers, visits of company officials to colleges and schools, lectures and displays of company service and employment practices before student bodies.
5. Public forums on such subjects as
Zoning and Planning.
Industrial Development.
Tax Problems and Burdens.

Education; Keeping the Schools and Industry in Step.

Resort and Recreation Activities.
Highway and Other Transportation

ANOTHER avenue for effective participation in the community that has been receiving increasing attention by utilities is area development. There is nothing new in the idea that the prosperity of the public service company depends upon the progress of its franchise area. For decades there has been continuous attention to the expansion of industrial, commercial, recreational, and other facilities of the community in the expectation of more usage of utility service and higher figures in the earnings statements. In the last ten or twelve years, however, the procedure has become more formalized and specific persons have been charged with direct tasks in this field.

Latterly, the situation has developed that even if a company was not too enthusiastic about area development or not eager to spend money in such a program it has been obliged to undertake the work at least to the extent of defending and preserving its present business against campaigning pep men from other parts of the country. Now there is even more urgency in the situation as the federal government undertakes the nurturing of such work by areas that are rated as chronic unemployment centers—and finances the luring of employers from other regions with tax money it collects from those same places.

BASICALLY, area development is the task of maintaining and advancing the economic status of a utility's service com-

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munity. It may well be launched in a meeting of those progressive business elements of the district who are or should be interested in added business for themselves, increased employment, improved housing, modern commercial and shopping centers, building of adequate schools, and provisions for more hospitals, churches, and welfare institutions. Such promotion will cost money, but the wider the financial support the greater the chance for immediate results. The utilities are better off if they participate in such an undertaking than if each or all of them carry on such work independently.

THREE are optional initial moves. A very excellent one is an economic survey of the territory to inventory the present assets in natural resources, present activity in business and industry, population and vital statistics, new business potentials.

Closely related to this is an analysis of the population census over a reasonable period of years with an approximation of the years ahead. The utility, particularly the electric company, is in an excellent position to build up area population figures. By keying the number of active residential electric meters onto standard U. S. Census plats it is possible to set up the ratio of persons per meter for each section served. Vital statistics, school census figures, and spot surveys by the company will keep this factor current. When carried on for some years this provides a reasonably accurate estimate for annual or biannual figures on actual population which is excellent information for the business and government interests of the area.

A Balanced Layout

ANOTHER primary tool is the land use map of the area. This is a drawing to scale of a village, city, county, or other specific region on which are shown by key all present occupancies and with vacant lands properly designated as to permissible use. A valuable supplement is an aerial survey picture which is useful in studying the nature of the land. With these papers it is possible for a development committee, zoning or planning commission, or a municipal authority to prescribe balanced layouts of different sections to be occupied by housing at varying price levels, commercial districts, and industrial zones for various types of production. It is also helpful to provide listings of available land for various purposes, showing size of plots, ownership, proximity to public utility facilities, zoning restrictions, approximate acreage prices, and other data.

Gathering of the following specific material is also a good opening move:

1. Listing of present principal industries.



2. Prospects for expansion of these enterprises.
3. Summary of the available labor supply by skills, age, sex.
4. Present pattern of labor rates and monthly salary schedules.
5. Data on local tax rates and those of competing areas.
6. Utility rates, including freight by railroad, truck, and airline.
7. General zoning stipulations.
8. Any sources of new labor.

THE next step is to find prospects who may become interested in the area. Generally this is not easy. Brochures must be prepared, newspaper, magazine, and other publicity obtained, and at least occasional advertisements must be placed in trade, national, or large city publications, including newspapers and weeklies. Direct mail to selected concerns is usually quite effective. Inspection trips can be arranged for people who finance or provide locations, design, and construct new undertakings, as well as agents or executives of interested firms and any other potential buyers. It is also helpful to maintain relationship with any state or regional unit or governmental department carrying on general work of this nature.

More important than all these is the man power to go out on the road, dig out possible prospects, work on people who have shown interest, do field work for those who make inquiries, and beat the drums constantly with the home folks to continue support of the activity. They must show a real pride in their own community and keep always in mind that development, if wisely carried forward, can mean more business, less taxes, and a finer home area for them.

LASTLY, the utility company which proposes to perform its full function as a citizen must have a definite and open policy on contributions to those privately supported health, educational, and welfare agencies which render constructive benefits to the company, its employees, and its clientele. The community that is lacking in schools, churches, and hospitals is surrounded by an invisible picket line that will lock out people and businesses that want to settle among forward-looking folks. The day is past when the American corporation can take a walk when the hat is passed for hospitals, colleges, and the agencies which provide guidance to youth or help to the unfortunate, the handicapped, the stricken. This support is not only an assessment upon the individual shareholders and the employees but also upon every company which shuns more government in every phase of modern business and living.

Aiding the Community

THE giving by a utility can be both in cash and in the arduous work of soliciting support from other companies and from citizens in general. There is one serious caution, however, to be applied to this very humane act. Participation by the utility is a constructive measure but the absorption of the entire undertaking by a company will only result in ultimate popular nomination as the patsy for any and every community undertaking requiring money and leadership.

There is a common misjudgment by people generally and by fund raisers specifically that no committee is complete and no undertaking can succeed unless the names of some specific business leaders appear on the letterhead. The result is

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usually gradual recognition that Mr. Boss is purely window dressing and he may not even recall that he has agreed to be a booster. The fact is that the company support rather than the name of the big brass is what counts. There is no reason why the public relations vice president must be the sole representative of the utility on any and every community undertaking. There is no law against sharing of the work so that operating, legal, accounting, or other department head men can properly serve in the civic affairs. It takes them out of the restrictive viewpoint of their own specialty and adds runners rather than cheerers to the race.

IN many of these community activities that we have discussed the average utility company has a trained and untapped reservoir of man power among those whom it has turned out to pasture. Apparatus sometimes is written off the books but not retired, being kept handy for emergencies. Many experienced employees may be retired but never written off the books; their performance, good or bad, stays with the customers and the community. The plus ones can still do a

great public relations job if they are drafted.

Some time within the next few years America will be so congested with able-bodied, senior citizens that the crisis thinking of the thirties will be put aside and the investment in the veteran will be used with some adequate realization of what he can do and how he can relieve those carrying on the heavy task of current affairs. It is a good thing to segregate the old-timers to make room for the younger people but there is no reason why local government sessions, civic meetings, development programs, community campaigns, and other undertakings cannot be monitored and even conducted by those over sixty-five years of age who are happy to have something to do and are not worried about hourly rates, overtime, vacations, or higher pay.

FINALLY, if the utility is to be tomorrow, as we believe it must be, an integrated member of the community, it must take part in all community affairs, including youth activities such as the schools, and especially in professional guidance and choice of occupation. In almost every

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area the local public utilities represent science and technology: A large proportion of the people working for the utilities are engineers or at least are dealing with technology. The schools are worried about the lack of appreciation and understanding of science and technology among their teachers. The utility engineers can perform a very real service helping young America to understand science in its everyday application as well as its more romantic aspect by assisting in the science programs of the high schools.

Intelligent Personnel

IN many cases and especially where a company has its home office, the utility company's personnel office has the most informed and skilled people in the area of selection, placement, testing, and training.

Today many high schools have programs to assist the students in their choice of profession, college, and the like. Here is one more opportunity in the utility to render a genuine community service through the participation of its personnel people in such programs.

YEARS ago the Supreme Court said utilities, after the protracted hearings, litigation, appellate reviews, and rate cuts, are entitled to "a period of repose." Such a relaxing interval is not possible because times and circumstances and people change and the public service companies must attend to these things with the same persistence that prevails in the maintenance of uninterrupted service to their customers for increasingly the utility must be the good neighbor.

Learning by Doing

IDEAS made possible our nation's growth. We are a venturesome, valorous, risk-taking people who backed ideas with savings. "If the labor unions would back their ideas with the money collected from their dues-paying members and, instead of striking against business, go into a business for themselves and prove that they can operate it—can run full time at all times, pay higher wages than present management, have shorter hours, better working conditions, and make enough money to keep operating and pay their share owners (dues payers) a fair return on their investment—they would get a better education in the relationship of profits to jobs and job security, to the standard of living, and of productivity to wage increases.

"Steel men, automobile men, coal mining men, mill owners, and hundreds of others have twitted unions to make good their claims to buy a company, run it, and prove they can do so better than those they now criticize and strike against. It's wide open, and all can step in and try it. But, Mr. Unionman, don't overlook the 52 per cent federal tax on profits."

—E. F. HUTTON,
Industrialist, investment banker, and author.

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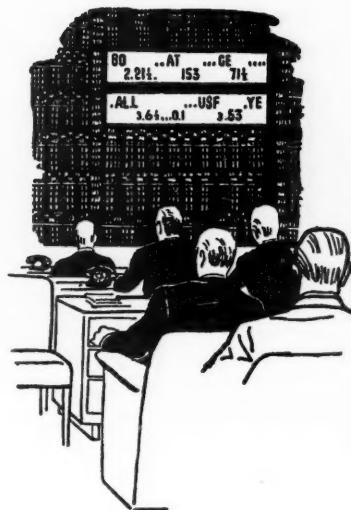
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Price-earnings:

Price-dividends?

By M. RICHARD SUSSMAN*



A re-evaluation of numerous studies concerning the influence of earnings and dividends on the common stock prices of investor-owned utilities. The relationship dividends should bear to earnings is discussed.

NUMEROUS studies have been made concerning the influence of earnings and of dividends on the common stock prices of public utilities. Some of these studies¹ have indicated that earnings have a greater influence on stock prices, while others² have indicated that dividends are more influential. At present, it appears that neither approach has been generally accepted. Although the value of these empirical studies cannot be denied, it would seem that from time to time some

orientation is necessary to view these quantitative data in the proper perspective.

The question of what relationship dividends should bear to earnings is not unique to the public utility field. Rather, financial managements of corporations in all fields of endeavor are concerned with the maximum utilization of earnings. In theory, the solution is a simple one: Earnings should be retained if they can be used to the stockholders' advantage; earnings should be distributed if the corporation cannot employ them with an adequate degree of profitability. As a corollary, stock prices should be influenced more by the earnings of a "growth" company, and stock prices should be influenced more by the dividends of a mature company. However, these results will be obtained only if

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¹"Dividend Payout and Utility Common Stock Value," by Fred P. Morrissey, *PUBLIC UTILITIES FORTNIGHTLY*, May 26, 1955, Vol. 55, No. 11, pp. 583-594.

²"Impact of Dividend Pay-out on Price-earnings Ratios," by Willard F. Stanley, *PUBLIC UTILITIES FORTNIGHTLY*, February 2, 1961, Vol. 67, No. 3, pp. 145-151.

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the investing public recognizes and accepts the characteristics of the individual company.

THUS quantitative data concerning the influence of earnings and dividends on stock prices should be viewed from two aspects: first, from the standpoint of the nature of the companies studied; and, second, from the standpoint of the public's recognition and acceptance of these qualities. Combining data of corporations which are at different stages in their life cycles makes these data invalid as a basis for comparing the influence of earnings *versus* dividends. Failing to recognize the peculiarities of the "public mind" leaves any results which may be obtained, purely on a theoretical plane.

Can a Public Utility Stock Be a "True Growth Stock"?

TRADITIONALLY, public utility stocks have not been classified in the growth category. Due to "public regulations in the public interest," some doubt has been cast on the ability of a public utility company to transform its growth in operations into growth for its stockholders; that is, into significant growth in earnings per share. Given this nongrowth concept, it would seem as though dividends should have had the greater influence on public utility stock prices. However, as previously indicated, studies have failed to fully substantiate this assumption. Thus, the present impasse exists.

The first question which must be answered before a clear road can be seen, is whether a public utility stock can realistically be classified as a growth stock, and how may this growth be accomplished? But what is a growth stock?

Many varying definitions have been offered, from that of a stock whose price has appreciated, to that of a stock whose earnings have increased. This author accepts the definition of a growth stock as one whose earnings (and thus eventually dividends) are growing at a rate which will more than compensate the investor for his time, effort, risk, and alternative cost incurred in investing.⁸

When considering the ways in which this required increase in earnings per share can be brought about, four general methods appear to be prevalent: (1) improving operating results; (2) improving financial leverage; (3) issuing new common shares at a "low cost"; and (4) retaining earnings.

IMPROVING OPERATING RESULTS. Improving operating results is one of the primary ways in which a corporation may increase its per share earnings. By more efficient use of existing facilities; by the introduction of new and more efficient facilities; or by the adoption of more profitable products or services, earnings per share of common stock may be improved.

However, the picture in the public utility field is not so clear cut. If operating results do improve, earnings may increase to a point which the regulatory commission considers excessive. This may cause a reduction in the permissible rates charged, and a reduction or at least limitation of earnings.

If the increase in the earnings per share of common stock of a public utility company can be traced to an improvement in

⁸ "Dividend Policies and Common Stock Prices," by J. E. Walter, *The Journal of Finance*, March 1956, pp. 29-41, incl.

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operating results, an analysis of the regulatory atmosphere must be undertaken to determine whether a further increase is possible, and whether the past increases will be maintained.

IMPROVING FINANCIAL LEVERAGE. The mechanics of financial leverage are well-known to the student of corporate finance. Essentially, the underlying principle of financial leverage may be explained by stating that "it is profitable to borrow funds, if the rate earned on the borrowed funds is higher than the interest paid for the funds." Of course, the same principle may be applied to preferred stock as well.

The leverage position of a company may be improved in two ways: (1) If one bond issue is replaced by another bond issue bearing a lower rate of interest, the common stock earnings benefit; (2) if the proportion of total capital which is provided by debt is increased, again the common shareholders may benefit.

However, there are limits to a corporation's ability to replace higher-cost issues with lower-cost issues, and to increase the proportion of fixed payment capital. If increases in common stock earnings can be attributed to improvements in financial leverage, substantial further increases should not be expected.

ISSUING NEW COMMON SHARES AT A "Low Cost." This method of increasing per share earnings is best explained by example. Assume that Utility A has \$1 million of capital which has been provided by 100,000 shares of common stock; the company is allowed to, and does, earn 10 per cent on its capital:

| | | | |
|---------------|-------------|--------------|---------|
| Total Capital | \$1,000,000 | Total Shares | 100,000 |
| Earnings | | Per Share | \$1.00 |

Utility A raises another \$1 million of capital by selling additional common shares. The market capitalization rate on present earnings is 5 per cent, or the selling price of each new share is \$20:

| | | | |
|------------------|-------------|--------------------|---------|
| Original Capital | \$1,000,000 | Original Shares | 100,000 |
| New Capital | \$1,000,000 | New Shares | 50,000 |
| <hr/> | <hr/> | <hr/> | <hr/> |
| Total Capital | \$2,000,000 | Total Shares | 150,000 |
| <hr/> | <hr/> | <hr/> | <hr/> |
| Total Earnings | \$ 200,000 | Earnings Per Share | \$1.33 |

As long as the market capitalization rate is below the permitted and achieved earning rate the issuance of new shares may increase per share earnings.

One might well wonder what would cause such a condition to prevail. Perhaps one answer could be that the "market" expects per share earnings to increase. If this is true, then expectation of growth causes growth. However, regardless of its cause, as long as such a condition does exist, a utility company can transform its growth in operations into growth for its shareholders.

RETAINING EARNINGS. Retention of a portion of common stock earnings is another generally used method of increasing earnings per share. Earnings provide a corporation with additional funds. If these funds are used with any degree of profitability, total future earnings will increase. As the new funds have been acquired without increasing the number of common shares outstanding, earnings per share will also increase.

However, can this increase in earnings per share be considered as "true growth"? The earnings which have been retained

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presumably could have been distributed to the shareholders and the shareholders could have used these funds to meet their personal requirements, or could have reinvested them. The retention of earnings, therefore, can be considered as an involuntary investment from the standpoint of the stockholder. Applying this approach, the investor would normally *expect* this involuntary investment to increase per share earnings.

If the future earnings increase just compensates the investor for his loss of the use of present earnings, his position has not improved. Only if the increase in earnings (and eventually dividends) *more* than compensates the investor for the loss of present value, will his position improve and grow.

Again, the situation of the public utility company is hindered in achieving this kind of growth. A regulatory commission limits the percentage return that may be earned on a given base. Although this percentage may be improved for the common stock equity by the existence of financial leverage, a limitation does exist upon the rate which can be earned on common stock funds. Given this limitation, the question which is posed, is whether this ultimate effective permissible return is sufficient to produce earnings of a growth stature.

A Format for Empirical Studies

FROM the foregoing discussion, it would appear that public utility stocks could rarely be classified in the growth category. Of the four major causes of growth, two are of a nonrecurring nature, or are sub-

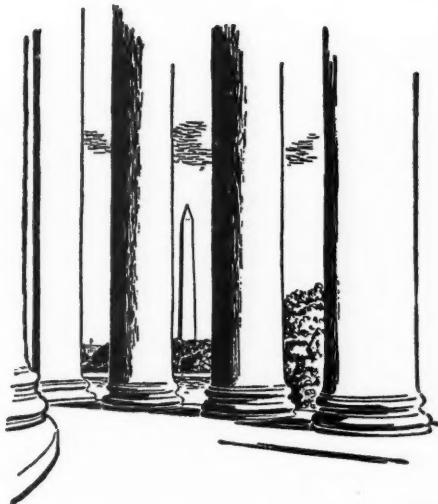
ject to the vagaries of the market place; the other two would seem to be severely handicapped by public regulation. In theory, dividends should have the greater influence on their market prices. However, many public utility stocks have been given the title of "growth." In addition, it has been suggested that earnings are more closely associated with prices.

This apparent conflict between theory and practice offers fertile ground for exploration by empirical studies. These studies should first consider the characteristics of the companies in their samples, and, second, they should determine the "public's" awareness of, and reaction to, these characteristics.

Each company should be considered in light of its earnings per share and the changes in these earnings. If earnings have increased, have the increases been of significant amounts? The sources of earnings increases should be examined to determine whether they were of a non-recurring or undependable nature. Finally, earnings changes and the causes of these changes should be related to some objective measure of the risk associated with each company.

WITH this objective, rational analysis as a base, a study of the actual reactions of the investing public should be more meaningful. Results which might seem to be contradictory on the surface should appear more logical in terms of the "public's" evaluation, or lack of evaluation of earnings changes, of risk, and of desired returns from investment.

Washington and the Utilities



Kennedy Reorganization Plans Progress Unevenly

PRESIDENT Kennedy's drive to reorganize the regulatory agencies is doing a bit better in Congress. Two of the seven plans have already been defeated, one in the Senate and the other in the House. Two others managed to squeak through the Senate despite unfavorable committee votes.

Last month the Senate Government Operations Committee voted to reject a plan to revise the Civil Aeronautics Board's procedures. Likewise, the Federal Maritime Board reorganization proposal ran into difficulty in hearings before the House Government Operations Committee. The CAB plan was saved by a vote of 37 to 33 and the FMB plan got through by 44 to 31.

Last November Kennedy announced the appointment of James M. Landis to help him reorganize the agencies. It was the President's first major appointment. Mr. Kennedy said at the time that reorganization of the regulatory bodies was of the highest priority.

Now Landis is being blamed on Capitol Hill for much of the troubles which hit

the reorganization proposals because he failed to let Congress in on his plans before they were sent to the Senate and the House. The Senate and House look upon the agencies as arms of Congress and are jealous of any attempt by the President to extend his influence over the regulatory bodies.

In addition, lawyers, lobbyists, and businessmen who deal with the agencies oppose any change in existing procedures. But on Capitol Hill the influence of lobbying groups is considered secondary to the failure of Landis to take Senators, Representatives, and commission members into his confidence.

THE reorganization plans which Landis wrote and which the President submitted to Congress sought to expedite proceedings before the agencies by allowing more flexibility in their operations. Many members of Congress agree that the operations of the agencies ought to be streamlined, but it is contended that these changes should be accomplished through legislation rather than with reorganization plans. Congress can make no changes in a reorganization proposal;

PUBLIC UTILITIES FORTNIGHTLY

it must accept the plan as is or reject it.

A House Interstate Commerce subcommittee approved legislation late last month which would carry out many of the changes in Federal Communications Commission procedures which were in an FCC reorganization plan turned down by the House some time earlier.

Congress will consider a revised version of the administration's plan to reorganize the Securities and Exchange Commission. Senators Williams (Democrat, New Jersey) and Javits (Republican, New York), both foes of the original reorganization scheme killed by a 52-to-38 vote in the Senate earlier in June, introduced a modified bill after consulting with SEC officials. It was learned the commission wants certain minor changes in the Williams-Javits Bill, but the two Senators were anxious to introduce a measure as soon as possible and worry about changes later.

THEIR bill would remove two features of the administration's plan criticized in Senate debate: a delegation of rule-making authority by the SEC to an individual commissioner, a hearing examiner, or a commission employee; and giving the full commission discretion to accept or reject appeals from decisions made by one commissioner or an SEC examiner or employee. The Williams-Javits Bill, like the administration plan, would permit delegation of nonrule-making functions, but it would require full commission review of decisions by individuals if requested by one commissioner or an agreed party to the case.

As of late June, President Kennedy had not even sent to Congress detailed reorganization of the Federal Power Commission, although in a special message last April 27th he did mention several reforms which he thought should be

made in the FPC setup. It may be, however, that the President will defer sending down any FPC plan rather than take a further defeat at this time.

Saline Conversion

PRESIDENT Kennedy submitted to Congress on June 26th detailed plans for a major acceleration of the federal saline water conversion program. The President transmitted to the House and Senate a draft bill to accelerate current research programs and permit construction of conversion plants "far larger than any now in existence."

Because water shortages are limiting economic growth in many parts of the world, the President said the time was ripe to intensify research on low-cost processes for converting sea and brackish water into fresh water. "I know of no federal activity that offers greater promise of making a major contribution to the ultimate economic well-being of all mankind than this program," Kennedy said in a letter of transmittal.

The bill was accompanied by a statement from Secretary of Interior Stewart L. Udall which outlined its basic provisions. Udall said that while demonstration plants are under construction, conversion processes presently available are not the best. For this reason, he said, research is necessary to develop a major breakthrough to permit cheaper conversion. Plants under construction should produce fresh water at about \$1 to \$1.25 per thousand gallons. The bill removes a current time limit and ceiling on expenditures by extending the duration of the current program from seven to fifteen years.

It also would authorize construction of additional demonstration plants, including units capable of daily production of

WASHINGTON AND THE UTILITIES

50 million gallons of water. The measure would provide federal grants for local governments, public or private utilities for capital investment needed to reduce the price to a competitive level. The President recommended provision for contracts for federal payment of the difference between the cost of converted water and a fair price for such water.

Railroad Mergers

THE Justice Department has entered into the complicated picture which has arisen over the current Interstate Commerce Commission hearings on the Chesapeake & Ohio Railroad's proposal to merge with the Baltimore & Ohio Railroad. Because the Pennsylvania Railroad is reported to be planning a giant new system, Justice may support the New York Central Railroad's wish to be included in any C&O-B&O merger plans.

The department's view is expected to be presented in a new filing with the ICC, with a specific proposal that the Central be included in the merger talks. In the ICC hearings, the B&O pointed out the following: (1) for the first five months of this year it was \$17.5 million in the red, and its total debt was \$425 million; (2) carloadings were 18.2 per cent below those of 1960; and (3) a merger could result in a saving of \$65.7 million over a five-year period.

The C&O testified it had a five-year \$232 million program to "rehabilitate" the B&O. The Central has tried to show the B&O is not in as serious a financial plight as has been pictured by the C&O and B&O. Both Governor Almond of Virginia and Governor Barron of West Virginia have come out in support of the C&O-B&O consolidation. A transportation analyst, Stanley Bergen of Northwestern University, has urged the saving

of passenger train business which, he said, was being strangled by mismanagement and outdated federal regulatory policies. He called for an early reopening of the ICC's 1957-58 investigation of its rules governing the separation of railroad operating expenses between freight and passenger service.

Bills in Congress

DESPITE strong Republican opposition, the Joint Committee on Atomic Energy has recommended approval of \$95 million for the construction of electrical generating facilities at the Hanford, Washington, nuclear reactor plant. The House was scheduled to take up the AEC authorization bill, in which the Hanford project is included, early this month. The government is requesting the funds to add generating facilities at the plant to produce electricity for the Northwest. Opposing the committee's favorable recommendation were Republican Senators Hickenlooper (Iowa) and Bennett (Utah), and Representatives Van Zandt (Pennsylvania), Hosmer (California), and Bates (Massachusetts).

The Joint Committee last month held three days of public hearings on amendments to the Atomic Energy Act of 1954. The AEC has requested a number of changes relating to liability for on-site damage to property, atomic energy patients, use of AEC accident reports in civil actions, and a number of other matters. The hearings were held by the Subcommittee on Legislation under the chairmanship of Senator Pastore (Democrat, Rhode Island).

The House Antitrust Subcommittee, headed by Representative Celler (Democrat, New York), will soon offer new rules governing conflict-of-interest cases in the federal government. The legisla-

tion will be aimed at preventing employees of the government from profiting on the outside from their jobs or using their governmental positions to benefit other persons. The new proposals are expected to closely follow the recommendations President Kennedy made on this subject. Bipartisan support for the measure is expected and action could be completed during the present session of Congress. Violators of the new rules would be subject to fines up to \$1,000 and prison sentences up to two years.

Mueller New Reclamation Power Head

JOHN W. MUELLER, who has been with the Niagara power project at Niagara Falls, New York, has been named chief of the power division of the Bureau of Reclamation, the Department of the Interior announced on June 26th. Mr. Mueller, who was formerly with the Bureau of Reclamation's Region Two office in California, was appointed by Commissioner of Reclamation Floyd E. Dominy. He succeeded D. S. Campbell, who has transferred to the office of the Assistant Commissioner and chief engineer in Denver.

Mr. Mueller, a native of Chinook, Montana, graduated in electrical engineering from the University of Nebraska in 1939. He was first affiliated with private utilities in Nebraska and Iowa and was with the Army Signal Corps during World War II. He entered service with the Bureau of Reclamation in the Region Two office in Sacramento, California, in 1946, and remained there until 1954, his principal responsibility having been regional electrical planning engineer. The region administers the giant Central Valley reclamation project.

Mueller undertook two foreign assignments from 1954 to 1957, first serving with a Bureau of Reclamation team advising the Turkish government on the establishment of a Department of Hydraulic Works for the planning, design, construction, and operation of irrigation and power facilities. He later served as chief power adviser for an International Co-operation Administration mission in Turkey. In November, 1957, he became construction manager for switchyards and transmission lines for Uhl, Hall, and Rich Engineers who managed the construction of the Niagara power project for the New York Power Authority.

CAB Clears Chalk on Transit Bid

THE Civil Aeronautics Board has approved a request by O. Roy Chalk to try to obtain control of Fifth Avenue Coach Lines, Inc., New York city bus systems. In his petition to the CAB, Chalk disclosed that it is his "present intention" to acquire at least 250,000 Fifth Avenue Coach Lines shares at \$18.75 a share. The CAB said Chalk, or one of the companies he heads, plans to finance the purchase of the Fifth Avenue Coach Lines shares by a private sale of additional equity securities of Transportation Corporation of America, of which Chalk is president and chairman, or by a private loan that would be secured by a pledge of the Fifth Avenue Coach Lines stock to be acquired.

The CAB did not say from whom Chalk intends to buy the shares. The CAB got into the matter because Transportation Corporation of America operates Trans Caribbean Airways, which flies between New York and Puerto Rico.



Phone Tax to Continue

ONCE again the House and the Senate have voted to extend the excise tax on telephone use. As had been expected in most quarters, the bill (HR 7446) passed both houses with little opposition and since President Kennedy already had indicated that he approved the extension, it was quickly signed into law.

The bill is the general excise levy. However, it is no longer without termination date and must be renewed each year. While the proposal was being considered by the Senate Finance Committee, Senator Kerr (Democrat, Oklahoma) led an attempt to repeal the 10 per cent tax on telephone service. This move was defeated by a voice vote of the committee.

On the Senate floor, prior to the favorable vote, Senator Carlson (Republican, Kansas) spoke out against the telephone tax. He stated:

These communications taxes were enacted to discourage the use of communications facilities during the World War II period.

The federal excise tax was applied for the first time to local telephone service in 1941. In 1951, the tax on electricity was repealed, leaving the telephone tax as the only one remain-

ing.

Telephone and

Telegraph

I am sure that many of you are interested in the telephone and telegraph taxes. I will speak about the telephone tax first, as it is the more important of the two.

Today, telephone service is supplied to approximately 40 million American homes and to more than six million business establishments. Every month these individuals and businesses are reminded that they are still paying emergency wartime taxes, and it occurs to me it is time this tax was removed.

SENATOR Carlson has introduced a bill (S 1551) which would repeal the tax on general telephone service. However, this is now a dead issue since the sentiment of Congress favored the extension for at least another year. In the course of debate, Senator Byrd (Democrat, Virginia) stated that, as chairman of the Committee on Finance, the telephone and transportation taxes should receive first consideration when tax reductions are taken up. He characterized these two particular taxes as "oppressive" and assured his co-operation when the financial condition of the country will permit a reduction.

For at least another year, the telephone tax is with us. There does seem to be, as indicated by Senator Byrd's remarks, a

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growing feeling that the telephone tax and the transportation tax should be the first to go when Congress decides to permit the tax to lapse. The telephone industry can be expected to once again present a strong case in favor of eliminating this levy when the matter comes up next year.

President Urges Speed-up of Space Communications

SPEAKING recently to the National Space Council and its chairman, Vice President Johnson, President Kennedy urged that progress should be aimed toward getting a working communications satellite into orbit as soon as possible. In this reference, the President has requested a series of studies and policy recommendations which would make the most effective use of such satellites. The various agencies concerned will help the NSC to prepare policy proposals on such complicated questions as ownership and operation of the system.

Once and for all the President ruled out the complete government domination of such a system when he stated that both public and private resources must be used to develop the system. He also took into account the fact that very close co-operation between the various governmental groups will be essential if speedy action is to be insured.

The American Telephone and Telegraph Company has echoed the President's plea for immediate action in a statement filed with the Federal Communications Commission. The concluding part of this document stated "the important thing is to get started." AT&T reiterated its claim that it has no desire or intention of seeking to control the proposed communications satellite system.

AT&T further noted that its sole

interest is in the earliest practicable establishment of a world-wide commercial satellite system that will be useful to all international carriers and agencies both here and abroad.

AT&T again stated that the principle of ownership based on use is, in that company's opinion, the most practical one to follow in the decision of capital contributions between the foreign communications agencies and the United States carriers.

The General Telephone & Electronics Corporation has asked the FCC to provide for allocation of a frequency band for an experimental world-wide space communication system. General would like to experiment with a system which would orbit satellites 22,300 miles above the earth. In its application, General stated that such a high-altitude system was the "only system proposed to date that can economically fulfill the requirements of global satellite communications."

Work Progressing on Bell Ground Station

WORK is progressing on a tract of land in western Maine near Rumford, about 75 miles by road from Portland, where the Bell system will install the world's largest horn as part of a new experimental space communications ground station.

The highly sensitive antenna will beam signals to satellites for relay to Europe and will also serve as a huge ear trumpet to collect the faint signals that are relayed back from Europe to the United States. The 250-ton steel and aluminum structure will be a rotating antenna—177 feet long and 94 feet high. It will be protected from the elements by the largest inflated earth-bound structure ever made. The spherical cover will be 210 feet wide and 161 feet

TELEPHONE AND TELEGRAPH

high and will be supported by air pressure.

The \$7 million station will be an enlarged version of the antenna at Holmdel, New Jersey, which has been used in the Project Echo experiments. The isolated Rumford location is expected to offer several advantages, among which is distance from microwave radio-relay stations, and a well-suited topography. The site is near a highway and workers are building an access road to the location. Although the primary purpose of the Rumford station will be experimental, the Bell system expects to use it later for commercial traffic.

General Telephone Appoints New Capital Officer

LIEUTENANT GENERAL Clovis E. Byers (U. S. Army, retired) has been appointed as vice president in charge of the Washington, D. C., office of the General Telephone & Electronics Corporation. General Byers succeeds Rear Admiral Frederick J. Bell (U. S. Navy, retired), who has resigned, but will continue to act as a consultant. Prior to retirement from the Army, General Byers was military adviser to the Assistant Secretary of Defense for International Security Affairs.

Legislation of Interest to the Communications Industry

THE Senate has approved legislation which would impose heavy penalties on anyone who maliciously destroys communications equipment intended for use by military or civil defense authorities. The legislation was prompted by the destruction of three microwave towers in Utah and Nevada. If the bill passes the House and is signed, penalties for such

offenses could be \$10,000, or a maximum of ten years in jail.

The House Commerce Committee has approved legislation which is designed to speed up proceedings before the Federal Communications Commission. The House has already rejected a reorganization plan proposed by President Kennedy and this new bill is viewed by most Washington observers as a compromise measure.

The new bill does not include the most controversial feature requested by the President, which would have strengthened the position of the FCC chairman. It does, however, contain a provision allowing the commission to rule out in advance the possibility of review in minor cases. This power has been used by the Federal Trade Commission for some years; however, the FCC has never used it.

The House version of this bill is quite similar to the Senate version and allows the FCC to designate certain classes of cases as "not of major communications importance." In cases thus designated, the right of appeal would be limited to the filing of exemptions to parts of the initial decision of a hearing examiner or board. These exceptions would be considered, under the terms of the House bill, but they would not be taken up by the full commission. The bill also contains provision allowing the commission, by a majority vote, to delegate any of its functions to a panel of commissioners, employee board, or individual employee.

U. S. Orbits Nuclear Power Source

THE United States has sent into orbit a satellite which has nuclear energy as the power for its two radios. The power output is rated at two and one-half watts or about the energy required to light up a flashlight bulb. The heart of the

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unit is a small cylinder of radioactive isotope, known as plutonium 238.

The satellite, designated "Transit," is circling the earth every 104 minutes at a maximum height of 629 miles and a minimum of 550 miles. The satellite is designed to enable ships, both military and commercial, to get continuous positions fixed through data received from "Transit." Government spokesmen have stressed that there is absolutely no danger of radiation from this satellite, nor is there any danger of any sort of atomic explosion. Several more test shots are expected before a fully operating navigational system emerges.

Communications Industry Spends \$182 Million

THE domestic communications operating industry of the United States, which includes both telephone and telegraph service, spent approximately \$182 million in its 1960 building construction program. This represents an increase of about \$7 million over the 1959 figure. These figures were recently released by the Business and Defense Services Administration, U. S. Department of Commerce.

Based on a survey covering 127 telephone companies—94 per cent of the industry—BDSA's communications industries division has stated that the construction program reflects the growing needs of the industry. According to the survey, 75 per cent of the money was used to construct buildings of the reinforced concrete type, and 15 per cent was used for structural steel frame buildings.

The survey was made by the BDSA to determine the volume of materials consumed by the communications industry for building construction alone. The

critical metals usage exceeds the requirements for ordinary building construction, since the communications buildings are usually designed with high ceilings and are strengthened to hold great amounts of dead weight to accommodate equipment. The survey reports that the telephone industry is the user of more steel for building construction than any other single industry.

The building program required 26,099 tons of carbon steel, of which 1,189 tons were steel plate. There were 12,494 tons of carbon steel used for structural steel frame buildings, including more than 7,000 tons of structural steel shapes and piling. Also used were 218,839 pounds of copper and copper base alloy and brass mill products; and lightweight aluminum consumed totaled some 65,000 pounds. Copper wire mill products accounted for 1,036,301 pounds, which included such items as copper wire and cable for lighting and power.

Army Announces Versatile Communications Units

THE Department of Defense has announced the delivery of three new long-range, high-powered, emergency communications systems for the use of the Army in isolated areas. The systems, which can be moved by existing aircraft, have ranges of 2,500, 5,000, and 7,000 miles, respectively. All three of the systems can be installed in less than four hours, as opposed to months required to install fixed stations with the same power.

Voice or teletype messages can be transmitted over the systems on a worldwide basis. The new systems are capable of bypassing fixed Army communications system stations which may be inoperative and communicating directly with the Pentagon.

Financial News and Comment

By OWEN ELY

"Long Term Financing" By John F. Childs

JOHN F. CHILDS, vice president of the Irving Trust Company, is well-known to a host of utility executives as head of the Financial Seminar, long a Wall Street institution—especially designed to give out-of-town officials a postgraduate course in the workings of the financial community.

The purpose of the book is to provide a practical text on corporate finance for the executive. It stresses and covers the three broad jobs of the financial vice president—(1) financing and financial policy, (2) investor relations, and (3) proper profit goals—cost of capital. His book, while covering corporations in gen-



eral, has many sections of interest to utilities.

In Chapter II on Capital Structure, the bonds of three utilities are compared as follows, to indicate the relationship between bond ratings and the debt ratio:

| | Rating | Bond Ratio |
|---------------------------------------|----------|------------|
| Cleveland Electric Illuminating | Triple A | 46% |
| Public Service of Oklahoma | Double A | 49 |
| Georgia Power Company .. | Single A | 55 |

Admittedly, however, there are many examples of variations in ratings where the debt ratio is about the same.

IN determining the debt ratio for any individual company, it is necessary not merely to consider the possible changes in earnings over the next five years, but also the possibility of very adverse conditions which might develop over a longer term.

Six determinants of debt ratio are the borrowing reserve, financial insurance, cost of capital, leverage, tax savings, and "pools of capital" (which provide the markets for particular types of securities).

The degree of earnings stability is an important factor in fixing an upper limit for the debt ratio, as illustrated by a comparison of the degree of variation in net earnings over a long-term period—a 4 per

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cent average for 20 electric utilities, 8 per cent for the Bell system, and an average of 21 per cent for 20 manufacturing companies. Correspondingly the average debt ratios were 46, 35, and 13 per cent.

Regarding the place of preferred stock in the capital structure, Mr. Childs thinks it should be compared with common stock instead of bonds; the bond ratio should be fixed on general considerations, hence he does not favor a policy of obtaining tax savings by substituting debentures for preferred stock. (See discussion of this question in this department in the previous issue.)

THE chapter on dividend policy is also of special interest. The charts on pages 47 and 47A illustrate the effect of differing percentages of pay-out on market price. One conclusion is that companies able to earn a high rate of return on rate base can probably do more for the market price of their stock if pay-out is kept on the low side. (Utility examples would be Florida Power & Light, with a pay-out ratio of only 48 per cent and a yield of about 1.4 per cent; and Houston Lighting with 49 per cent and 1.5 per cent; it would seem that officials of growth utilities already are well aware of this principle.) On the other hand, companies with low rates of return but relatively stable earnings should have a liberal dividend policy—which attracts the investors more interested in cash income than in capital gains.

The section on stock dividends (pages 53-62) should also be of special interest to utility companies since many of them pay occasional stock dividends, while a few pay regular dividends both in cash and stock. An interesting point is that a stock dividend may be used as a device to increase the future cash dividend rate—although the nominal rate per share may remain unchanged. The policy of a regular

cash rate may be desirable from a public relations angle (possibly to avoid stirring up the regulatory authorities?). If there is "no compelling public relations reason," John Childs holds that an increase in the cash dividend would be preferable to a special stock dividend—it would be more thoroughly understood by the unsophisticated stockholder and would eliminate the cost of issuing stock. Some companies say they pay a stock dividend because "stockholders like it," but they should be careful to determine whether this is merely a superficial view expressed by a few small stockholders. Proposed ways of surveying stockholder opinion as to stock dividends are discussed at some length; in view of the rather large number of stock dividends declared by utility companies, it would seem well worth while for utility executives to study this chapter.

CHAPTER IV on the Financing Program is also of interest, particularly with reference to the temporary use of bank loans pending long-term financing. Programs should generally be worked out over a period of four or five years in the future so as to allow for varying market conditions. Moreover, while the financial vice president should bear the major burden of devising the program, he should rely on four principal experts: the lawyer (or lawyers), the underwriting firm if one is used, the tax expert, and the accountant—the operation should thus be run on a "team" basis.

Chapter V contains an interesting section on convertible securities (pages 126-133). The utility companies do not have much of a uniform policy in their use of convertibles—some seem to like them, others do not.

Mr. Childs remarks:

From the company's point of view, a convertible issue may be made to ap-

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July 5th
negotiated,
received.
Source,

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pear very appealing with the combined advantages of a senior security and a common stock. Under some circumstances, it may be a useful and even necessary type of security. However, because of the seductive nature of convertibles, they may be misused. They have distinct disadvantages. For example, the company may plan for conversion to take place by a certain date. This is subject to the whims of the common stock market and if it does not occur as hoped for, the issue may turn out to be the tail that wags the dog.

He also discusses the nine purposes for which convertibles can be issued, some of which would apply more to industrial companies. For utilities the main objective of a convertible would be to gradually strengthen the capital structure as conversions occur, spread the dilution of earnings over a period of time rather than taking it all at once, etc. (It may be remarked that, with reduced equity financing requirements, most utility companies now issue common stock on a more moderate basis than in the past—say on a 1-for-20 basis about every two or three



ELECTRIC AND GAS UTILITY SECURITY OFFERINGS IN JUNE

| Date (Mill.) | Amount | Description | Price To Public | Under-writing Spread | Offering Yield | Aver. Yield For Securities Of Similar Quality | Success Of Offering | |
|---------------------------------------------|--------|--------------------------------------------------------|-----------------|----------------------|----------------|-----------------------------------------------|---------------------|--------------------|
| | | | | | | | Moody Rating | Earns.-Price Ratio |
| <i>Bonds and Debentures</i> | | | | | | | | |
| 6/1 | \$20 | Indiana & Michigan Electric S. F. Deb. 5½s 1986 | 101.77 | .73C | 5.00% | 4.54% | A | d |
| 6/2 | 30 | Columbia Gas Deb. (s.f.) 5½s 1986 | 100.35 | .89C | 5.10 | 4.54 | A | c |
| 6/6 | 12 | Pennsylvania Electric Deb. (s.f.) 5½s 1986 | 102.11 | 1.00C | 5.10 | 4.57 | A | a |
| 6/8 | 5 | Community Public Service 1st (s.f.) 5½s 1991 | 102.00 | 1.34C | 5.12 | 4.57 | A | c |
| 6/13 | 2 | Missouri Edison 1st 5s 1991 | 101.25 | 1.17C | 4.92 | 4.56 | A | d |
| 6/14 | 30 | Virginia Electric & Power 1st 4½s 1991 | 101.19 | .85C | 4.80 | 4.42 | Aa | d |
| 6/15 | 30 | Michigan Wisconsin Pipeline 1st (s.f.) 5½s 1981 | 101.83 | 1.38C | 5.35 | 4.78 | Baa | c |
| 6/15 | 20 | Baltimore Gas & Electric S. F. Deb. 4½s 1986* | 101.07 | .75C | 4.75 | 4.42 | Aa | a |
| 6/16 | 20 | Southern Electric Generating 1st (s.f.) 5½s 1992 | 101.54 | .84C | 5.15 | 4.56 | A | a |
| 6/20 | 20 | Brooklyn Union Gas 1st (s.f.) 5½s 1986 | 101.77 | .89C | 5.00 | 4.58 | A | a |
| 6/21 | 50 | Consolidated Edison 1st 4½s 1991* | 100.80 | .70C | 4.70 | 4.44 | Aa | d |
| 6/28 | 18 | Massachusetts Electric 1st 5s 1991 | 102.04 | .94C | 4.87 | — | Aa | b |
| <i>Common Stock—Offered to Stockholders</i> | | | | | | | | |
| 6/13 | 64 | Pacific Gas & Electric | 71.00 | N | 3.94 | 6.06% | ** | |
| 6/22 | 22 | Northern Illinois Gas | 49.50 | .30N | 2.83 | 4.69 | † | |
| <i>Common Stock—Offered to Public</i> | | | | | | | | |
| 6/7 | 47 | Public Service Electric & Gas | 52.25 | 1.08N | 3.82 | 5.75 | a | |

*Nonrefundable for about five years. **Offered to stockholders on a 1-for-20 basis. Rights expire July 5th. †Offered to stockholders on a 1-for-16 basis. Rights expire July 11th. C—Competitive. N—Negotiated. a—It is reported that the issue was well received. b—It is reported that the issue was fairly well received. c—It is reported that the issue sold somewhat slowly. d—It is reported that the issue sold slowly. Source, Irving Trust Company

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years—so that there is less need to issue convertibles to cushion the effect on earnings than in earlier years.) The discussion of warrants is also of interest, although only one or two utilities, such as Public Service of New Mexico, have made a practice of issuing them in recent years.

Sections of Chapter VI on the "Financial Community" are of interest to utility executives, especially the discussion of "listing *versus* nonlisting." Of the 124 electric utility stocks listed in the monthly table in this department (in alternate issues of the FORTNIGHTLY), 73 are listed on the New York Stock Exchange, six on the American Exchange, and 45 are over the counter (or in a few cases listed on the Midwest or other out-of-town exchanges). The question as to whether over-counter issues should be listed in New York is a matter of frequent discussion. Utility executives usually seem to be somewhat on the defensive with respect to keeping their stocks in the unlisted market. The book lists ten advantages and three possible disadvantages of listing. Major advantages are that certain types of investors will not buy in the over-counter market, and that listing provides a closer and better-reported market for stockholders, new or prospective.

CHAPTER VII, "Selling Senior Securities," discusses the question of competitive *versus* negotiated offerings, and also analyzes the requisites for a private sale of securities. The question of underwriting costs is also studied at some length. A table on page 237 lists all of the expenses as a percentage of proceeds; unfortunately, the data are based on an SEC bulletin covering the years 1951-55, but the figures are probably still relevant. Refunding issues and exchange offers are also discussed.

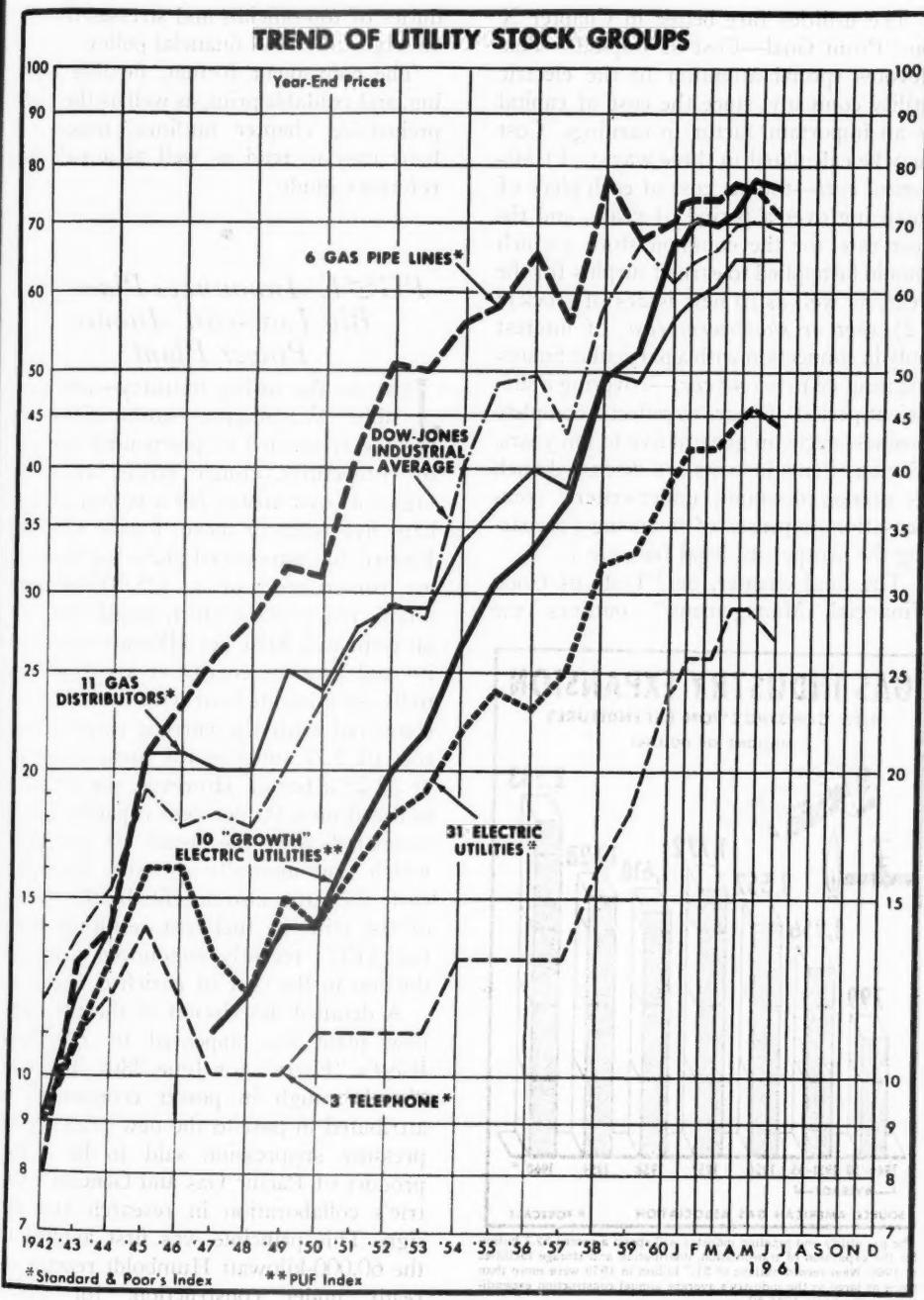
Chapter VIII, which covers the sale of

common stock, discusses the issue as to whether stock should be sold through subscription rights (in some cases this is required by stockholders' pre-emptive rights) or as a straight offering. The chart on page 254 is of special interest—it illustrates the various factors contributing to the cost of common stock financing, which in this instance is calculated to total 10 per cent. This detailed discussion should be of very practical interest to the utility company official who is trying to fix a policy with respect to equity financing. The analysis of underwriting costs in connection with rights' issues, as compared with the cut in price which might be required for a direct offering, is also a valuable contribution.

One of the special features of the book is the comprehensive treatment of investor relations, and as Mr. Childs remarks: "Success in this area is just as important as your capital structure, your dividend policy, or any other part of your long-term financing program."

CHAPTER IX on investor relations devotes about two-thirds of a page to the question "How to Tell What Analysts Want"; this section might well have been extended, especially as it does not give any specific advice to utility companies. The problem of maintaining personal contacts with security analysts (through local society luncheon forums, other luncheons or dinners, receptions, due diligence meetings, planned trips to the company's area, and personal calls by officials) should be quite helpful, though for many utility executives this will be "old hat." The discussion of "written material" issued by the company is also worth while, and might well have been expanded—though it seems slanted more to industrial companies, and a special section for utilities would have been welcome.

FINANCIAL NEWS AND COMMENT



PUBLIC UTILITIES FORTNIGHTLY

The utilities fare better in Chapter X on "Profit Goal—Cost of Capital." This devotes special attention to the electric utility company, since the cost of capital is an important factor in earnings. Cost may be calculated in three ways: (1) *historical cost*—the net cost of each piece of financing over a period of years, and the cost rate for the common stock (which should be applied to earned surplus for the year, as well as to new issues of stock); (2) *spot or short-term cost*, of interest only in connection with a particular financing; and (3) *current cost*—covering a sufficient period of years to reflect a complete business cycle, in general five to ten years. Various items in costs are discussed such as market discount, underwriters' compensation, expenses of financing (preparing the prospectus, legal fees, etc.).

The final chapter, on "Tests of Good Financial Management," outlines the

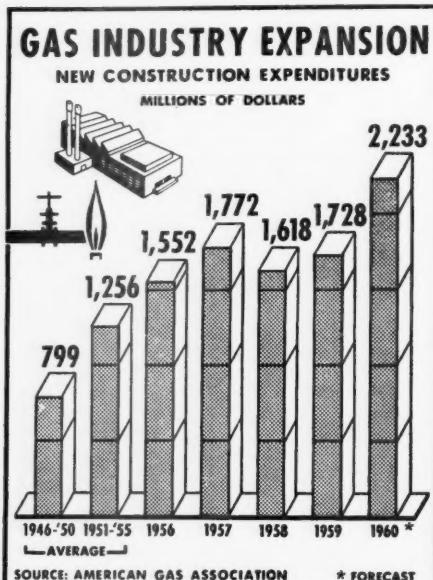
duties of top officials and stresses the advantages of sound financial policy.

The convenient format, flexible binding, and readable print, as well as the comprehensive chapter outlines, make the book easy to read as well as a valuable reference guide.

PG&E Announces Plans for Big Low-cost Atomic Power Plant

JUST as the utility industry—and possibly Washington authorities—had become reconciled to postponing the day of competitive atomic power (even in high-fuel-cost areas) for a period of perhaps five years or more, Pacific Gas and Electric has announced plans for immediate construction of a 325,000-kilowatt atomic power plant which would cost only an estimated \$181 per kilowatt of capacity and produce energy at a cost of 5.6 mills per kilowatt-hour with the first core, compared with the current conventional cost of 5.77 mills in the area, using oil at \$2.25 a barrel. However, the estimate is based on a 90 per cent capacity factor compared with the usual 80 per cent, which automatically lowers operating cost; the latter also benefits by the saving of 0.4 mills in fuel cost resulting from the AEC's recently announced price reduction in the cost of enriched fuel.

A detailed description of the proposed new plant has appeared in *Electrical West's "Extra"* for June 28th. The new "breakthrough in power economics" is attributed in part to the new principle of pressure suppression said to be a by-product of Pacific Gas and General Electric's collaboration in research and design. This principle was first applied to the 60,000-kilowatt Humboldt reactor already under construction, for which



The gas utility and pipeline industry will spend a record \$2.2 billion for the expansion of transmission, distribution and storage facilities in 1960. Near-record outlays of \$1.7 billion in 1959 were more than twice as large as the industry's average annual construction expenditures in the years 1946-50.

| Appro Reven (Mill.) | \$ 7 |
|---------------------------|------|
| 240 | 240 |
| 114 | 114 |
| 65 | 65 |
| 517 | 517 |
| 23 | 23 |
| 363 | 363 |
| 505 | 505 |
| 59 | 59 |
| 47 | 47 |
| 25 | 25 |
| 131 | 131 |
| 85 | 85 |
| 32 | 32 |
| 33 | 33 |
| 113 | 113 |
| 191 | 191 |
| 43 | 43 |
| 140 | 140 |
| 239 | 239 |
| 35 | 35 |
| 143 | 143 |
| 55 | 55 |
| 555 | 555 |
| 317 | 317 |
| 133 | 133 |

FINANCIAL NEWS AND COMMENT

earlier claims had also been made that it would be competitive with the relatively high fuel costs in that area. Experience with the small Vallecitos unit in California was also said to be favorable. All three use the boiling water principle developed by General Electric, as does the Dresden plant built by GE for Commonwealth Edison. Several years ago the forecast was also made that Dresden would be competitive, but after opening for a brief period last fall the plant has been closed because of trouble with fuel rods, and Commonwealth has apparently abandoned hopes that it will be competitive, at least with the first core.

THE new PG&E plant will be located at Bodega Bay about fifty miles north of San Francisco. Apparently, announcement of the company's plans was held up until after the favorable Supreme Court decision with respect to safety re-

quirements at the Fermi plant in Michigan. Some of the reduction in construction costs will be due to enclosing the reactor and containment system in an underground structure instead of using the expensive sphere which has been a typical feature of atomic plants thus far. The turbine generator will use saturated steam at 1,000 psi and 550 F. The first core, approximately 75 tons of uranium enriched to about 2½ per cent U 235 (fuel pellets in stainless steel rods), will have an estimated in-core fuel life of three and a half years.

Assuming that the AEC and other authorities give prompt attention to the pending application, PG&E expects to start construction work in August and have the plant ready for full operation by the end of 1965. Site design allows for a total of four units and will thus make possible an ultimate nuclear station capacity of 1.3 million kilowatts.



FINANCIAL DATA ON GAS UTILITY STOCKS

| Approx. Revenues (Mill.) | | 6/30/61 Price About | Divi- dend Rate | Approx. Yield | Recent Share Earns. | Per Cent Increase In Share Earnings Recent 5-yr. Avg. | Price- Earn. Ratio | Div. Pay- out | Approx. Book Value |
|--------------------------------|---------------------------|---------------------------|-----------------------|------------------|---------------------------|-------------------------------------------------------------|--------------------------|---------------------|--------------------------|
| \$ 7 O | Ala. Tenn. Nat. Gas | 28 | \$1.20 | 4.3% | \$1.57Ma | — | 7% | 17.8 | 77% 42% |
| 240 S | American Nat. Gas | 42 | 1.20 | 2.9 | 2.14Ma | 17% | 7 | 19.6 | 56 38 |
| 114 A | Arkansas Louisiana Gas | 37 | 1.00 | 2.7 | 1.55Ma | D12 | 46 | 23.8 | 65 45 |
| 65 O | Colo. Interstate Gas | 40 | 1.25 | 3.1 | 1.98Ma | 15 | 13 | 20.2 | 63 27 |
| 517 S | Columbia Gas System | 26 | 1.10 | 4.2 | 1.59Ma | 13 | 8 | 16.4 | 69 40 |
| 23 O | Commonwealth N. G. | 31 | 1.10 | 3.5 | 1.78Ma | 5 | 6 | 17.4 | 62 55 |
| 363 S | Consol. Nat. Gas | 56 | 2.30 | 4.1 | 2.89Ma | D9 | 2 | 19.4 | 80 63 |
| 505 S | El Paso Nat. Gas | 26 | 1.30g | 5.0 | 1.46De | 10 | 4 | 17.8 | 89 21 |
| 59 S | Equitable Gas | 40 | 1.85 | 4.6 | 2.32Ma | D4 | 3 | 17.3 | 80 45 |
| 47 O | Houston N. G. | 34 | .80 | 2.4 | 1.55Ap | D5 | 20 | 22.0 | 52 21 |
| 25 O | Kansas Nebr. Nat. Gas | 31 | 1.04 | 3.4 | 1.82Ma | D1 | 10 | 17.0 | 57 39 |
| 131 S | Lone Star Gas | 27 | 1.00 | 3.7 | 1.18Ma | D5 | 2 | 22.9 | 85 52 |
| 85 S | Miss. River Fuel | 39 | 1.60 | 4.1 | 2.25Ma | D13 | 3 | 17.3 | 71 52 |
| 32 S | Montana Dakota Util. .. | 34 | 1.20 | 3.5 | 1.95Ma | D10 | 6 | 17.5 | 62 31 |
| 33 S | Mountain Fuel Supply .. | 36 | 1.40 | 3.9 | 1.90Ma | 4 | 5 | 19.0 | 74 49 |
| 113 S | Nat. Fuel Gas | 28 | 1.20 | 4.3 | 1.76Ma | D2 | 4 | 16.0 | 68 54 |
| 191 S | Northern Nat. Gas | 36 | 1.40 | 3.9 | 2.14Ma | 5 | 5 | 16.8 | 65 33 |
| 43 S | Oklahoma Nat. Gas | 36 | 1.40 | 3.9 | 2.06Ma | D6 | 5 | 17.5 | 68 34 |
| 140 S | Panhandle East. P. L. .. | 40 | 1.80 | 4.5 | 3.05De | D9 | 4 | 13.1 | 59 43 |
| 239 S | Peoples G. L. & Coke .. | 81 | 2.60 | 3.2 | 4.57Ma | 14 | 9 | 17.7 | 57 42 |
| 35 O | Pioneer Nat. Gas | 30 | .88 | 2.9 | 1.25De | D10 | 6 | 24.0 | 70 40 |
| 143 S | Southern Nat. Gas | 44 | 2.00 | 4.6 | 2.27Ma | 14 | — | 19.4 | 88 36 |
| 55 O | Southern Union Gas | 32 | 1.12 | 3.5 | 2.23Ma | 20 | 4 | 14.4 | 50 30 |
| 555 S | Tenn. Gas Trans. | 23 | 1.12 | 4.9 | 1.39Ma | 18 | 12 | 16.5 | 81 28 |
| 317 S | Texas East. Trans. | 18 | .80 | 4.4 | 1.07Ma | 26 | — | 16.8 | 75 11 |
| 133 S | Texas Gas Trans. | 34 | 1.50 | 4.4 | 2.33Ma | D7 | 10 | 14.6 | 64 26 |

PUBLIC UTILITIES FORTNIGHTLY

| Approx. Revenues (Mill.) | | (Continued) | 6/30/61 Price About | Divi- dend Rate | Approx. Yield | Recent Share Earns. | Per Cent Increase In Share Earnings. Recent 5-yr. Avg. | Price- Earn. Ratio | Div. Pay- out | Approx. Book Value | Approx. Revenues (Mill.) | |
|--------------------------------|---|----------------------------|---------------------------|-----------------------|------------------|---------------------------|--------------------------------------------------------------|--------------------------|---------------------|--------------------------|--------------------------------|-------|
| 171 | O | Transcont. Gas P. L. | 22 | 1.00 | 4.5 | 1.15Ma | 3 | 6 | 19.2 | 87 | 21 | 28 |
| 389 | S | United Gas Corp. | 35 | 1.50 | 4.3 | 2.38My | 5 | 2 | 14.7 | 63 | 42 | 25 |
| | | Averages | | | 3.9% | | 3% | 8% | 18.1 | 69% | | 6 |
| | | <i>Retail Distributors</i> | | | | | | | | | | 1,174 |
| \$ 40 | S | Alabama Gas | 33 | \$1.60 | 4.8% | \$2.34Ma | D4% | — | 14.1 | 68% | 33% | 25 |
| 68 | O | Atlanta Gas Light | 53 | 2.00 | 3.8 | 3.79Ma | 45 | 9% | 14.0 | 53 | 44 | 10 |
| 3 | O | Berkshire Gas | 19 | 1.00 | 5.3 | 1.09F | D10 | 5 | 17.4 | 92 | 42 | 11 |
| 8 | A | Bridgeport Gas | 33 | 1.68 | 5.1 | 2.22Ma | 17 | — | 14.9 | 76 | 54 | 28 |
| 7 | O | Brockton-Taunton Gas | 25 | 1.06 | 4.2 | 1.54F | 20 | 14 | 16.2 | 69 | 41 | 5 |
| 96 | S | Brooklyn Union Gas | 35 | 1.20 | 3.4 | *1.57Ma | *D11 | * 5 | *22.3 | 76 | 43 | 14 |
| 15 | O | Cent. Indiana Gas | 18 | .80 | 4.4 | .78Ma | D11 | — | 23.1 | 103 | 58 | 47 |
| 7 | O | Chattanooga Gas | 6 | .30 | 5.0 | .52F | 73 | 5 | 11.5 | 68 | 54 | 22 |
| 18 | O | Elizabethtown Cons. Gas | 61 | 1.80 | 2.9 | 3.41De | 17 | 9 | 17.9 | 52 | 79 | 277 |
| 77 | O | Gas Service | 37 | 1.72 | 4.7 | 2.10Ap | D29 | 8 | 17.6 | 82 | 35 | |
| 9 | O | Hartford Gas | 56 | 2.40 | 4.3 | 3.38Ma | 20 | 8 | 16.6 | 71 | 53 | |
| 3 | O | Haverhill Gas | 30 | 1.60 | 5.3 | 1.96Ma | D1 | 7 | 15.3 | 82 | 55 | |
| 23 | O | Indiana Gas & Water ... | 27 | 1.00 | 3.7 | 1.49Ap | D9 | — | 18.1 | 67 | 44 | |
| 62 | S | Laclede Gas | 30 | 1.05 | 3.5 | 1.60Ma | 10 | 5 | 18.8 | 66 | 38 | |
| 9 | A | Louisiana Gas Serv. | 19 | .68 | 3.6 | 1.21Ma | 1 | — | 15.7 | 56 | 48 | \$ 51 |
| 8 | O | Mich. Gas Utilities | 14 | .60 | 4.3 | .87Ma | D3 | 8 | 16.1 | 69 | 32 | |
| 56 | O | Minneapolis Gas | 37 | 1.60 | 4.3 | 1.97Ma | D6 | 5 | 18.8 | 81 | 45 | \$ 6 |
| 20 | O | Miss. Valley Gas | 25 | 1.20 | 4.8 | 1.80Ma | D7 | — | 13.9 | 67 | 40 | 17 |
| 7 | O | Mobile Gas Service | 27 | 1.10 | 4.1 | 1.50My | 3 | — | 18.0 | 73 | 40 | 7 |
| 8 | O | New Haven Gas | 42 | 2.00 | 4.8 | 2.94De | D9 | 5 | 14.3 | 68 | 69 | 13 |
| 18 | O | New Jersey Nat. Gas ... | 33 | 1.00f | 5.0 | *1.57Ma | * 8 | *11 | *21.1 | 64 | 34 | 10 |
| 130 | O | Nor. Illinois Gas | 51 | 1.40 | 2.7 | 2.32Ap | 12 | 11 | 22.0 | 60 | 42 | 6 |
| 11 | O | North Penn Gas | 14 | .65 | 4.6 | 1.18Jc | 28 | 7 | 11.8 | 55 | 65 | 6 |
| 23 | O | Northwest Nat. Gas ... | 26 | .92 | 3.5 | *1.62Ma | * 8 | * 7 | *16.0 | 57 | 34 | 3 |
| 364 | S | Pacific Lighting | 54 | 2.40 | 4.4 | 3.05Ma | 1 | 5 | 17.7 | 79 | 39 | 13 |
| 15 | O | Piedmont Nat. Gas | 15 | .50 | 3.3 | .89Ma | 1 | — | 16.9 | 56 | 23 | 12 |
| 2 | O | Portland Gas Lt. | 23 | r | — | 1.44De | D31 | 4 | 17.3 | — | 29 | 11 |
| 12 | A | Providence Gas | 12 | .56 | 4.7 | .63De | D3 | 2 | 19.0 | 89 | 48 | 4 |
| 4 | A | Rio Grande Valley Gas .. | 8 | .16 | 2.0 | .29De | D10 | 7 | 27.6 | 55 | 46 | |
| 6 | O | So. Atlantic Gas | 20 | .90 | 4.5 | 1.35De | 55 | 8 | 14.8 | 67 | 29 | |
| 18 | S | So. Jersey Gas | 41 | 1.10 | 2.7 | 1.48Ma | 10 | 14 | 27.7 | 74 | 53 | |
| 38 | S | United Gas Impr. | 64 | 2.40 | 3.8 | 3.48Ma | 3 | 10 | 18.4 | 69 | 50 | |
| 71 | S | Wash. Gas Light | 64 | 2.40 | 3.8 | 4.18Ma | 7 | 5 | 15.3 | 53 | 38 | |
| 20 | O | Wash. Nat. Gas | 29 | 1.00 | 3.4 | 1.52Ma | D6 | 14 | 19.1 | 66 | 37 | |
| 13 | O | Western Ky. Gas | 24 | .80x | 3.3 | 1.42Ma | D8 | 11 | 16.9 | 56 | 36 | 68 |
| 60 | O | Western Power & Gas .. | 25 | 1.00 | 4.0 | 1.50Ma | 3 | 8 | 16.7 | 67 | 17 | 323 |
| | | Averages | | | 4.1% | | 5% | 6% | 17.8 | 68% | | 38 |

2

FINANCIAL DATA ON TELEPHONE, WATER, AND TRANSIT STOCKS

| Approx. Revenues (Mill.) | | 6/30/61 Price About | Divi- dend Rate | Approx. Yield | Recent Share Earns. | Per Cent Increase In Share Earnings. Recent 5-yr. Avg. | Price- Earn. Ratio | Div. Pay- out | Approx. Book Value | | |
|--------------------------------|---|------------------------------|-----------------------|------------------|---------------------------|--------------------------------------------------------------|--------------------------|---------------------|--------------------------|-----|-----|
| | | <i>Communications</i> | | | | | | | | | |
| \$7,920 | S | American T. & T. (Cons.) | 117 | \$3.60h | 3.1% | +\$5.56F | 5% | 5% | +21.0 | 65% | 64% |
| 405 | A | Bell Tel. of Canada | 52 | 2.20 | 4.2 | 2.51De | 5 | — | 20.7 | 88 | 58 |
| 54 | O | Cin. & Sub. Bell Tel. | 107 | 4.50 | 4.2 | 5.89De | 6 | 2 | 18.2 | 76 | 77 |
| 317 | A | Mountain States T. & T. | 29 | .90 | 3.1 | 1.16F | D9 | 3 | 25.0 | 78 | 74 |
| 405 | A | New Eng. T. & T. | 46 | 1.90 | 4.1 | 2.38Ma | 6 | 7 | 19.3 | 80 | 56 |
| 1,135 | S | Pacific T. & T. | 38 | 1.14 | 3.0 | +1.39F | D8 | 3 | +27.3 | 82 | 61 |
| 136 | O | So. New Eng. Tel. | 50 | 2.20 | 4.4 | 2.61De | 4 | 6 | 19.2 | 84 | 66 |
| | | Averages | | | 3.7% | | 1% | 4% | 21.5 | 79% | |
| | | <i>Independents</i> | | | | | | | | | |
| \$ 4 | O | Anglo-Canadian Tel. | 43 | \$1.20 | 2.8% | \$3.39De | D1% | 15% | 12.7 | 35% | 49% |
| 59 | O | British Col. Tel. | 48 | 2.20 | 4.6 | 2.73Ma | D11 | — | 17.6 | 81 | 27 |
| 4 | O | Calif. Inter. Tel. | 21 | .70 | 3.3 | 1.33Ma | 150 | NC | 15.8 | 53 | 24 |

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FINANCIAL NEWS AND COMMENT

| Approx. Revenues (Mill.) | | 6/30/61 Price About | Divi- dend Rate | Appros. Yield | Recent Share Earns. | Per Cent Increase In Share Earns. Recent 5-yr. Avg. | Price- Earn. Ratio | Div. Pay- out | Appros. Book Value |
|--------------------------------|---|---------------------------|-----------------------|------------------|---------------------------|--------------------------------------------------------------------|--------------------------|---------------------|--------------------------|
| (Continued) | | | | | | | | | |
| 28 | O | Calif. Water & Tel. | 36 | 1.36 | 3.8 | 2.29Ma | 14 | 5 | 15.7 |
| 25 | O | Central Tel. | 28 | .88 | 3.1 | 1.61De | 3 | 4 | 17.4 |
| 6 | O | Commonwealth Tel. | 26 | 1.00 | 3.8 | 1.56De | 6 | 8 | 16.7 |
| 6 | O | Florida Tel. | 26 | 1.00 | 3.8 | 1.33Ma | 2 | 8 | 19.5 |
| 1,174 | S | General Tel. & Elec. | 26 | .76 | 2.9 | +.99Ma | D13 | 3 | 26.2 |
| 25 | O | Hawaiian Telephone | 18 | .54 | 3.0 | +.78Ma | 26 | 1 | 23.0 |
| 10 | O | Inter-Mountain Tel. | 19 | .80 | 4.2 | .92De | 19 | — | 20.7 |
| 11 | A | Puerto Rico Tel. | 83 | 1.80 | 2.2 | 3.31De | 71 | 15 | 25.0 |
| 28 | S | Rochester Tel. | 26 | 1.00 | 3.8 | 1.79Ma | 23 | 1 | 14.5 |
| 5 | O | Southeastern Tel. | 23 | 1.00 | 4.3 | 1.35De | 25 | 2 | 17.0 |
| 14 | O | Southwestern St. Tel. | 30 | 1.28 | 4.3 | 1.65Ma | 9 | 5 | 18.2 |
| 14 | O | Tel. Service of Ohio | 35 | .36z | 1.0 | 1.33Ma | 10 | 9 | 26.3 |
| 47 | O | United Utilities | 26 | .80 | 3.1 | 1.20De | 23 | 7 | 21.7 |
| 22 | O | West Coast Tel. | 34 | 1.36 | 4.0 | 1.95Ma | D2 | 5 | 17.4 |
| 277 | S | Western Union | 41 | 1.40 | 3.4 | 1.80De | D31 | — | 22.8 |
| Averages | | | | | | | | | |
| | | | | | 3.4% | | | | 65% |
| Water Companies | | | | | | | | | |
| Holding Companies | | | | | | | | | |
| \$ 51 | S | American Water Works | 25 | \$1.00 | 4.0% | \$1.55Ma | D16% | 9% | 16.1 |
| Operating Companies | | | | | | | | | |
| \$ 6 | O | Bridgeport Hydraulic | 44 | \$2.00 | 4.6% | \$2.35De | 26% | 3% | 18.7 |
| 17 | O | Calif. Water Service | 24 | 1.20 | 5.0 | 1.49Ap | D11 | 2 | 16.1 |
| 7 | O | Elizabethtown Water | 37 | 1.40 | 3.8 | 1.46De | D16 | — | 25.3 |
| 13 | S | Hackensack Water | 57 | 2.40 | 4.2 | *4.05De | *D7 | * 2 | *14.1 |
| 10 | O | Indianapolis Water | 29 | 1.20 | 4.1 | 1.68Ma | 1 | 1 | 17.3 |
| 6 | O | Jamaica Water | 46 | 2.20 | 4.8 | 2.99Ma | D6 | 1 | 15.4 |
| 6 | O | New Haven Water | 72 | 3.40 | 4.7 | 3.49De | 20 | 1 | 20.6 |
| 3 | O | Ohio Water Service | 28 | 1.50b | 5.4 | 1.68Ma | D4 | — | 16.7 |
| 13 | O | Penn. Gas & Water | 33 | 1.40 | 4.2 | 1.76Ma | D1 | 6 | 18.8 |
| 12 | O | Phila. & Sub. Water | 35 | .85v | 2.4 | 1.57Ma | D5 | 8 | 22.3 |
| 11 | O | South. Calif. Water | 29 | 1.10 | 3.8 | 1.58Ma | 14 | 5 | 18.4 |
| 4 | O | Southern Gas & Water | 25 | 1.00 | 4.0 | 1.50Ma | D12 | 5 | 16.7 |
| Averages | | | | | | | | | |
| | | | | | 4.2% | | | | 76% |
| Transit Companies | | | | | | | | | |
| \$ 21 | O | Baltimore Transit | 10 | \$.50d | 5.0% | \$.52De | D50% | — | 19.2 |
| 11 | O | Cincinnati Transit | 8 | .40 | 5.0 | .55De | D40 | 10% | 14.5 |
| 68 | S | Fifth Ave. Lines | 21 | t | — | 1.07De | — | — | 19.6 |
| 323 | S | Greyhound Corp. | 24 | 1.10a | 4.6 | 1.64De | — | 10 | 14.6 |
| 38 | S | Nat. City Lines | 24 | 2.00 | 8.3 | 1.73De | D22 | — | 13.9 |
| 13 | O | Niagara Frontier Trans. | 16 | .80 | 5.0 | 2.13De | 190 | 8 | 7.5 |
| 20 | A | Pittsburgh Rys. | 16 | .30 | 1.9 | — | — | — | 38 |
| 6 | O | Rochester Transit | 7 | .40 | 5.7 | .87De | D20 | — | 8.0 |
| 20 | O | St. Louis P. S. "A" | 10 | .80 | 8.0 | .53De | D31 | — | 18.8 |
| 13 | S | Twin City R. T. | 14 | 1.00 | 7.2 | 1.26De | — | 11.1 | 151 |
| 20 | O | United Transit | 7 | .70 | 10.0 | .63De | D28 | — | 65 |
| Averages | | | | | | | | | |
| | | | | | 6.0% | | | | 84% |

A—American Stock Exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. Ja—January; F—February; Ma—March; Ap—April; My—May; Je—June; Jy—July; Au—August; Se—September; Oc—October; N—November; De—December. *Deferred taxes resulting from liberalized depreciation are not normalized. If normalized, the price-earnings ratio would be higher, and the rate of increase in share earnings would be smaller. †On average shares. D—Decrease. a—Also 10 per cent stock dividend October 24, 1960. b—Also 2 per cent stock dividend September 30, 1960. d—Fifty cents paid thus far in 1961, payments irregular. f—Regular annual 2 per cent stock dividend included in yield. g—Stock split 5 for 4 to stockholders of record October 11, 1960. h—Dividend rate of \$3.60 per annum to be established beginning with July 10, 1961, payment. i—Three per cent stock dividend January 16, 1961. t—Payments irregular, \$1 paid in 1960, fifty cents thus far in 1961. v—Also 3 per cent stock dividend payable January 6, 1961. (Similar dividend was paid January 7, 1960.) x—Also 12½ per cent stock dividend payable October 7, 1960. y—Excluding two abnormal gains. z—Plus 3 per cent stock dividend December 31, 1960. NC—Not comparable.



What Others Think

Survey of Japan's Fuel and Power Industries

THE fuel requirements of Japan's rapidly expanding industries and its increasingly consumer-oriented economy are receiving considerable attention in connection with the government's ten-year plan to double national income, it was reported recently.

A comprehensive survey of all sectors of Japan's fuel and power industry, made by the Fuji Bank, Ltd., Japan's largest commercial institution and sent to its New York agency, points out the similarity of the problems faced by Japan and the countries of Western Europe.

All of these—the need to import fuel, particularly petroleum, a depressed coal industry, hydroelectric power already producing at close to capacity—are compounded for Japan because of the country's great deficiency in fuel resources.

One of the aims of the ten-year plan will be to rationalize the entire industry, since previous economic planning has been somewhat disrupted by a lag in power production. The bank's survey indicates that the principle of "freedom of choice" based on an adequate supply of low-cost fuel and power, advocated by the Robinson Report of the OEEC's Fuel Advisory Committee in February, 1960, has strongly influenced Japanese thinking. Long-range planning centers on insuring

adequate power supplies at economically competitive prices, reducing the proportion of foreign exchange expended for fuel imports, and bringing supply and demand into equilibrium.

To achieve these goals the Japanese government must solve a number of pressing problems: (a) reduce and stabilize fuel prices; (b) finance \$17.5 billion of new capital equipment; (c) obtain a constant supply of imported fuel while limiting the foreign exchange burden; and (d) secure additional needed sites for electric power plants and refineries.

The bank's analysis revealed these points:

Japan's fuel requirements in 1970 are expected to be 2.3 times as great as in 1959, implying an annual growth rate of 7.8 per cent, the same rate anticipated for the economy as a whole. While overall consumption will increase importantly, the projected consumption pattern will change only slightly from 1959 proportions. The changes, however, reflect Japan's ever-increasing industrialization and the shift in emphasis from primary to secondary and tertiary industries.

Within the overall picture, the greatest change will occur in sources of power. Traditional fuels—coal, lignite, firewood,

WHAT OTHERS THINK

charcoal, and hydroelectric power—will continue to decrease while the use of petroleum and thermal electricity will greatly increase. The proportion of electricity to the total power supply is expected to rise from 38.5 per cent in 1959 to 46.6 per cent in 1970 and to exceed 50 per cent by 1980.

SINCE 1951 Japan's requirements for electric power have been growing at an annual rate of 11 per cent. With the rapid dwindling of economically exploitable reserves of water power, electricity in the future will be largely generated by thermal plants. The present 6-to-4 ratio of hydro to thermal power will be reversed by 1970 and is expected to become a 2-to-8 ratio in 1980. Generating capacity in 1970 will reach 57 million kilowatts, of which 35 million kilowatts will be thermal plants.

The ten-year plan does not specify the type of fuel to be used for this increased generating capacity, apparently reflecting the government's reluctance to propose a policy running counter to the interests of the domestic coal industry. Meanwhile, the electric power companies already are switching to heavy oil, for which equipment costs as well as fuel consumption are cheaper than for coal.

By 1970 petroleum will become Japan's primary fuel source, supplying 50 per cent of total requirements, compared with 30 per cent in 1959. Greatest increase in demand will be for heavy oil, largely because of the changeover to heavy oil-generating facilities. Refined crude oil production will reach 89 million kiloliters (nearly 750 million barrels), 3.6 times current volume, requiring a tripling of refinery capacity to 2,050,000 barrels per day.

To expand refinery capacity to meet the anticipated demand for heavy oil

will result in a large overproduction of gasoline with a resultantly serious effect on gasoline prices. Despite the efforts of the refineries to raise heavy oil output without increasing gasoline production, there is at present a glut of gasoline and prices tend to be soft. Moreover, the impending liberalization of trade has prompted the power companies and the steel industry to demand further price concessions from the refiners.

IN reply, the refineries curtailed production 10 per cent in April, from 621,000 to 560,000 barrels per day. This action already is under investigation by the Fair Trade Commission on the grounds that if it was based on an inter-company agreement, it may constitute a violation of the antimonopoly law.

The refineries' future hopes are pinned largely on the greatly increased naphtha requirements of the expanding petrochemical industry. Some government experts optimistically estimate that by 1970 petrochemical production will require 10 million kiloliters (2,641,700,000 gallons) of naphtha rather than the 3.1 million kiloliters (818,927,000 gallons) called for in the ten-year plan.

As in the United States and Western Europe, Japan's coal industry presents a special and thorny problem. A rationalization plan developed by the Ministry of International Trade and Industry in December, 1958, characterized the coal industry as "structurally depressed" and proposed an orderly retirement of uneconomic operations by limiting production to 55 million tons a year. To place coal on a better competitive footing, the ministry also proposed lower prices, a reduction in the labor force, and increased productivity. With improved productivity, by 1963 the industry expects

PUBLIC UTILITIES FORTNIGHTLY

to achieve its 55 million ton output with 60,000 fewer workers.

Whether the coal industry can secure a stabilized market even for this limited production remains to be seen. At present long-term contracts are under negotiation with the industry's largest customers, the electric power and steel companies. Because coal constitutes one of Japan's few natural resources and thus does not require foreign exchange, and the industry absorbs a large number of workers, the government will almost certainly continue a protective policy. Ironically, while domestic production is cut back, imports of special purpose coal are expected to increase sizably during the next decade.

No important rôle for atomic energy in generating electricity is foreseen in the near future. In February this year the Atomic Energy Commission published its long-range plan for the development of atomic power, which called for the generation of 1,000 megawatts of electricity by 1970. These figures have been included in the ten-year plan as part of thermal power production. Making atomic power production economically competitive remains the greatest stumbling block to its utilization.

Among other fuel sources, Japan's reserves of natural gas are insufficient for

more than limited use. Firewood and charcoal, which twenty-five years ago were more important than petroleum, have been reduced to a precarious existence as household fuels for farms and outlying villages. As living standards rise and electric home appliances spread to country districts, wood and charcoal are expected to virtually disappear.

In conclusion, the survey notes that the major problem facing the industry as a whole will be to keep pace with the rate of economic growth called for in the ten-year plan. Dependency on imported fuels will increase from 34 per cent in 1959 to 59 per cent in 1970 and to 73 per cent by 1980. While the proportion of fuel to overall imports will rise only from 17.4 per cent in 1959 to 18.8 per cent in 1970, the total volume of imports will require greatly increased foreign exchange and a corresponding increase in exports.

Even if a high level of exports can be maintained and sufficient foreign exchange generated, the fact that Japan must import between 60 and 70 per cent of its fuel constitutes a problem in itself. Now under consideration are steps to reduce industrial fuel consumption through technological improvements and a re-examination of development plans for atomic energy.

Government Control and Investor-owned Utilities

INVESTOR-OWNED utilities are "sitting ducks" for those persons and groups who are dedicated to the expansion of the welfare or socialistic state. This was the opinion of Stanford Hoff, former chairman of the public service commission of Maryland, in his address before the annual spring business conference of the Maryland-District of Columbia Utilities Association.

He said that utilities are engaged in an apparently losing battle to prevent the expansion of government control, or "creeping Socialism." Hoff said that a facet of this trend relates to public power, others with a phase in which government competes in the field of communications. Whatever the nature of the public service, investor-owned companies have felt the burden of taxation which

WHAT OTHERS THINK

the welfare state imposes, he explained.

Backers of governmental control have found it politically expedient to make the public service companies "whipping boys," Hoff continued. This has come about, he believes, because regulation is in itself socialistic. For the benefits of achieving a noncompetitive status utilities have become subject to governmental control and regulation. Customers, who more and more are identifying themselves as the beneficiaries of government, rather than its defenders, consciously or otherwise, are seeking more controls in the hope of increased benefits.

HOFF said this attitude toward a utility is partially inspired by the fact that it is so closely associated with and a part of the daily lives of so many people, like police and fire departments.

And things are getting worse instead of better, he stated. Hoff saw no evidence of reversal of the trend toward a more socialistic welfare state, no signs of enlightenment among those who regard utilities as, at least, semigovernmental agencies, and no sign of reduction of any form of taxes utilities are required to pay or collect. If utility owners wished this present state of affairs to continue, Hoff suggested they do exactly as they had done in the past. However, if they found these matters gave them some concern, he offered several suggestions under three headings: public relations, lobbying, and politics.

He noted that many concerns have tried to improve their public relations. Much still remains to be done. Impressions are formed by contacts with meter readers, servicemen, drivers, cashiers, and the like. Because unhappy customers are the people who cheer the loudest when politicians disparage the regulated industries, the "alienation of the affections of

the public is not a luxury" that any utility can afford, Hoff stated. He begged the utility companies under no circumstance to ignore that phase of the public relations program, or personnel training program, that will instill in the employees the necessity for constant care in the manner in which they meet and treat the public.

UTILITY company executives should not look upon lobbyists as members of a dirty profession, he continued. Those lobbyists who conduct themselves within the confines of propriety render real assistance and advice to legislators. They are frequently akin to expert witnesses in a rate case and can furnish reliable information which is not otherwise available. Utilities should not share the public opinion that lobbying is related to dirty politics and should be avoided at any cost. If this attitude is adopted, he believes utilities will be doing themselves a disservice and missing an opportunity to protect themselves from harmful legislation.

Hoff admitted there are dangers in overlobbying, but added that the industry has not fully recognized the benefits of closer liaison with legislators and other law-making bodies, both in session and out. It is unfortunate that utility personnel avoid politics "like the plague," he said. The great majority of state senate and house members are lawyers, doctors, insurance men, etc., he pointed out, and only a small number have any experience with small business, and none at all are even closely associated with big business.

HOFF urged people in the utility industry to take a close interest in politics. Utilities cannot protect their interests by ignoring the realities of politics, and assuming a purely defensive attitude. Utilities are involved in politics, whether

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they like it or not, he explained. They should take an interest in politics and politicians, at least to the extent of seeing to it that people who know of and are sym-

pathetic with utility problems seek public office and get encouragement and support from the industry.

—M. B. P.

Senate Hears Testimony on Fuels Policy

ON June 11th and 12th, the Senate Committee on Interior and Insular Affairs heard testimony regarding Senate Resolution 105, which would establish a special committee to study the nation's fuels and energy resources and requirements.

Testifying in support of the resolution was Philip Sporn, president of the American Electric Power Company. He stated that the nation will have to rely, during the next four decades, upon fossil fuels—oil, natural gas, and coal—for at least 80 per cent of its energy requirements. The demand is expected to be at least two and one-third times greater than it was in 1960. Mr. Sporn said there is no need for apprehension about the continued availability of all the energy necessary to meet existing and projected requirements through the year 2000, provided we continue to administer our industry and our social-economic system so as to make possible the continuation of the exploration, exploitation, and development of these energy resources with which we are so richly endowed.

He warned, however, that at present all energy resources industries are beset by numerous difficult problems, which he described as the severe economic recession in the coal industry, the question of energy imports—both oil and gas—as they affect all our domestic energy industries, questions of regulation of our

natural gas production and use, and the very difficult problem of determining the extent to which human and material resources should be devoted to the production of nuclear energy.

THE only way to resolve the conflicts and difficulties within and among our energy resources industry is to develop a sound national fuels policy based on a full and careful study of the nation's energy resources base, the long-term expansion of the demands to be placed on these resources, and the existing energy resources policies that may conflict with each other and with the best long-term interests of the country, he declared.

From such a careful study, guide lines for a national fuels policy should emerge that would serve to resolve contradictory and conflicting regulatory, legislative, and administrative policies with respect to our energy resources, Mr. Sporn said.

Mr. Sporn stated that by 1975, nuclear energy can be expected to provide only 2 per cent of the total energy demands of the nation and by 2000 it will provide only 20 per cent of the total, even under the most optimistic assumptions.

By 2000, he declared, the requirement for petroleum will be more than twice the 1960 level and bituminous coal will have to supply almost double the 631 million tons maximum annual production ever achieved by the coal industry.

The March of Events



House Passes Delaware Compact Bill

THE House of Representatives on June 29th passed the Delaware River Basin Compact Bill. The measure would set up a five-member interstate and federal commission to develop and operate the Delaware river basin resources.

The House on a voice vote approved the compact after defeating 257 to 92 an attempt to send it back to the Judiciary Committee with instructions to take away the vote of the federal member.

The commission would be made up of one federal representative appointed by the President and officials from Pennsylvania, New York, New Jersey, and Delaware.

The Pennsylvania legislature on June 22nd gave its approval to the proposed interstate compact. The other three states involved already had passed the measure.

The compact provides for long-range development of the watershed, including water resources and flood control. It also incorporates earlier agreements among the states on use of the river's water.

Connecticut

Rate Adjustment Proposed

THE Hartford Electric Light Company has asked the Connecticut Pub-

FPC Commissioner Named

PRESIDENT Kennedy on June 30th named Texas oil executive and Interior Department official, Lawrence J. O'Connor, to a five-year term on the Federal Power Commission. He succeeds Arthur Kline, whose term recently expired.

Since 1960, O'Connor has been administrator of the oil imports office in the Interior Department. O'Connor, forty-six, was educated at Rice Institute in Houston and at the Harvard Graduate School of Business Administration.

Before joining the Interior Department in 1959, O'Connor worked for about a year as an independent petroleum consultant in Houston.

Mr. O'Connor is a Democrat, as are the first two administration appointees, Joseph C. Swidler, who will be the chairman, and Howard Morgan. The present chairman, Jerome K. Kuykendall, may leave the commission this year. To ease the transition to Mr. Swidler, he is remaining until September 1st as chairman. Whether he will continue to serve as commissioner for the rest of his term, which expires June 22, 1962, is doubtful.

lic Utilities Commission to approve a 2½ per cent tax adjustment of all of its rates without holding a public hearing. The

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company's proposal would increase the bills of all of its electric and gas customers by $2\frac{1}{2}$ per cent, effective July 1st. The utility told the commission that it needed the adjustment to help cover an increase in the gross earnings tax rate from $1\frac{1}{2}$ to 4 per cent, approved earlier by the state legislature.

H. B. Carey, Jr., vice president and

general counsel of the company, said immediate relief "is necessary. A hearing on this matter, at this time, with the added cost to the company, would cause unnecessary delay and result in a further adverse impact on the company's finances." He said the commission has the necessary discretionary authority to permit the adjustment without a hearing.

Florida

New Gas Franchise Vote Set

THE Miami City Commission last month OK'd a new city-wide franchise vote in the Houston Gas Company rate case. The action came after Miami Jaycee leader, Sanford Freed, who spearheaded the fight against previous Houston rate plans, reported the new proposed rates are both fair and acceptable.

Commissioners, meeting informally, indicated they would set the special referendum for November. It will be a part of

the regular city election. Houston officials said they were satisfied with the plan and agreed to put up \$5,000 toward the cost of the election.

Freed reported that the new rate plan means a substantial reduction for private residences using the gas. He said the monthly residential minimum has been reduced from \$2 to \$1.50, that disconnect charges have been eliminated, that interest will be paid on deposits, and the 10 per cent penalty for delinquent bills has been removed.

Louisiana

Arkla Enters Gas Generation Unit Business

THROUGH a subsidiary company, Arkansas Louisiana Gas Company will enter the manufacture and fabrication of gas power generation equipment, the company announced at Shreveport last month.

W. R. Stephens, Little Rock, Arkansas, president of Arkla, said the Arkla Air Conditioning Corporation, a wholly owned subsidiary, had agreed to purchase most of the assets of the Ingersoll Cor-

poration of Shreveport, which has been a leading dealer and fabricator of natural gas engine-driven generation assemblies for oil field, small municipal, and other uses. The purchase price was \$75,000 for land and building, not including inventory.

Stephens said the new division of Arkla will expand the gas company's emphasis regionally and nationally on the rising use of gas-operated engine units for independent production of electric power by commercial and industrial consumers.

Missouri

Commission Notified of Student Fare Ban

FORMAL notification of elimination of the 15-cent student fare, effective Sep-

tember 1st, was filed last month by St. Louis Public Service Company with the state public service commission. The commission authorized elimination of the

THE MARCH OF EVENTS

student rate in an order issued last December. The filing of the tariff was in compliance with that order. Effective date of the change was set by the commission as September 1st to coincide with the start of the school year.

Letters were sent earlier this year by the company to officials of all boards of

education and school districts where reduced student rates have been in effect. The letters notified them that the fare would be discontinued on September 1st, under authority of the commission, unless some plan of subsidy could be arranged. A company spokesman said no such plan had been submitted.

New Mexico

Gas Rate Order Set Aside

A JUDGMENT setting aside a denial by the state public service commission of a rate increase sought by Southern Union Gas Company has been entered in Santa Fe by District Judge Clyde C. McCulloch.

The court also remanded the application back to the state commission. Lee Chambard, chairman of the commission, said his agency had thirty days to file an appeal of the judgment in the state supreme court.

In the court's conclusions of law, there was included a finding that the commission's order, issued April 29, 1960, is "unreasonable, arbitrary, and confiscatory and violates the due process of law provisions of both the U. S. and New Mexico constitutions."

The court vacated the commission's order which flatly denied rate increases that included a 25 per cent boost for residential customers. The increases have been in effect on a provisional basis since September 1, 1959.

New York

Governor Names Commissioner

EDWARD P. LARKIN of Floral Park, Long Island, presiding supervisor of the town of Hempstead, was appointed to the state public service commission last month by Governor Rockefeller. The usual time elapse of a week or more between the appointment and induction was dispensed with. Mr. Larkin was sworn in immediately by the governor at his office in New York city.

Mr. Larkin was elected to the state

assembly in 1952 and to the state senate in 1954. He won his first two-year term as presiding supervisor a year later.

The appointment of Mr. Larkin to the \$24,000-a-year commissionership was made possible by certification by the commission chairman that an additional commissioner was needed to assist with the work load.

The state commission normally has five members, but under a 1949 law it is empowered to certify that one or two additional commissioners are needed.

North Carolina

Power Bill Rejected

KILLED by the public utilities committee of the state senate was a bill which would have permitted a group of

western counties in the state to negotiate for purchase of Nantahala Power & Light Company transmission facilities.

Nantahala, a subsidiary of the Alumi-

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num Company of America, seeks to sell its distribution system, retaining its hydro-electric facilities. Duke Power Company reportedly has been negotiating to purchase the system, at a price of about \$4 million.

The rejected legislation was sponsored by Senator Frank Forsyth of Cherokee. It would have provided for the creation of a power district consisting of the following counties: Clay, Cherokee, Graham, Macon, and Swain. Forsyth had suggested that the power district buy the transmission facilities and purchase power from the Tennessee Valley Authority.

Gas Budget Data Given

GENERAL MANAGER Charles G. Simpson of the city-owned Philadelphia Gas Works told the city council's finance committee recently the company would spend \$7,281,200 for new distribution facilities to supply gas to new homes, apartments, and industrial customers next year.

Simpson said this was 64 per cent of the company's anticipated capital expenditures of \$11,303,700 in the 12-month period. The balance, he said, would be spent for new production facilities, plant addi-

Electric Co-op Bill Killed

A RURAL electric co-operative bill was shelved in the state senate after it had been amended to change its original intent.

In its original form, the bill would have allowed rural co-operatives to continue operating facilities annexed into municipalities.

Private power companies and the State League of Municipalities succeeded in a drive to have it amended into a bill which would have required co-operatives to sell out such facilities. Its original backers then moved that the bill be killed.

Pennsylvania

tions, and replacements. He put the company's capital needs at \$61,708,000 for the next five years.

Simpson's appearance was said to make the first time the company had submitted its capital budget for councilmanic approval.

Councilman Victor E. Moore, committee chairman, said the action stemmed from a request made during last year's probe of the gas works. Simpson said the company had no objection to the new regulation.

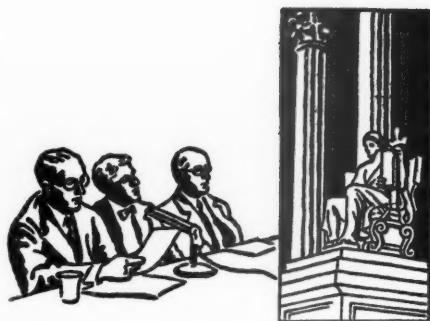
Texas

Commission Rules Itself Out

THE state railroad commission recently ruled it has no jurisdiction in a dispute over who will supply gas to San Antonio customers. United Gas Corporation, Shreveport, Louisiana, had appealed to the commission to void an order by the San Antonio Public Service Board which gave the contract to a new company, Alamo Gas Supply Company. Officials of United Gas, which has supplied gas in the city for thirty years and claims

a \$40 million investment in the area, had no comment on the state commission's decision. A spokesman for the company said it had not had time to decide on a course of action.

The San Antonio board in mid-June gave Alamo Gas Supply a contract to supply natural gas at fixed prices for twenty years starting April, 1962. Its bid was \$30 million lower than the next low bidder among five companies competing for the contract, a board spokesman said.



Progress of Regulation

Trends and Topics

Managerial Discretion As to Rate Structures

COMMISSIONS are charged with the duty of fixing just and reasonable rates, but they often go beyond the question of reasonableness of rates as a whole and examine rate structures. It is their duty to insist upon rates which are not discriminatory as between different customers. Some commissions, however, have disclaimed authority to go into detailed questions of rate structure, holding that the design of rate schedules is a managerial function of the public utility company.

Managerial Discretion Recognized

The Massachusetts Department of Public Utilities, in a recent rate decision involving Dedham Water Company (38 PUR3d 169), criticized a rate structure differentiating between customers, but it quoted from its decision in the Boston Edison Company case (24 PUR3d 153, 159) to the effect that the department leaves to the discretion of management the task of establishing the rate structure, as distinct from the rate level, unless it determines that unreasonable discrimination exists. The theory behind this position was said to be clear. On the question of what a utility is entitled to earn, its interests and the interests of its customers are divergent. The former desires higher earnings, while the latter wishes lower rates. Once this issue has been determined, however, this divergence of interests is no longer necessarily present. The company ordinarily gains no advantage by placing an undue burden on some of its customers to the benefit of others.

The Massachusetts commission many years ago expressed similar views, as, for example, when it was passing upon street railway rates on complaint of Federated Civic Clubs *v* Springfield Street R. Co. (PUR1925A 127). It said that the commission was not justified in substituting its judgment for that of the officials of a street railway unless proposed rates were unreasonably high. The same view was expressed in a case involving Edison Electric Illuminating Company (PUR1928D 859) when it said that except under unusual circumstances, and unless some unreasonable discrimination occurs, the

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establishment of rates for different classes should generally be left to the discretion of the company. The same opinion was expressed in the Springfield Gas Light Company case (70 PUR NS 82).

The Massachusetts supreme judicial court, reviewing a rate decision involving New England Telephone & Telegraph Company (88 PUR NS 73), in which the commission had refrained from interfering with managerial discretion, approved the general principle that a public regulatory board cannot assume the management of a company and cannot, under the guise of rate making, interfere in matters of business detail with the judgment of company officers reached in good faith and within the limits of a reasonable discretion. That case, however, did not relate to rate structures but to the question of a debt ratio (83 PUR NS 238).

A Canadian commission declared that, after it had performed its function of ascertaining a rate base and the amount of revenue required, the determination of proper rate schedules is the function of management. Its action should not be interfered with unless it is clearly demonstrated that the schedules are unfair, unjust, or unduly discriminatory as between different classes of customers (95 PUR NS 201).

A utility company, says the New Mexico supreme court, has a common-law right to fix its own rates and adopt such rate schedule as it considers just and reasonable and place such schedule in effect, subject to the commission's right to investigate the reasonableness of the rates (28 PUR3d 348).

Initiation or Substitution of Rates

Nevertheless many commissions, with the approval of courts, do substitute rates in place of those proposed by a public utility company. In one case involving Virginia Electric & Power Company the Virginia supreme court upheld commission power to change, fix, and substitute for any filed schedule, rate, rule, or regulation found to be unjust, unreasonable, insufficient, or unjustly discriminatory, any other schedule, rate, rule, or regulation affecting the rates charged, provided they are found to be just and reasonable. The power of the commission, said the court, is not limited to the mere change of a particular rate that the public must pay for service, but it has power to change any part of a filed schedule, rate, rule, or regulation (11 PUR3d 438).

The power of the Arkansas commission to eliminate escalator clauses from a proposed rate schedule was upheld by the state supreme court (14 PUR3d 52). An Indiana court said that the allocation of an authorized revenue increase between different classes of ratepayers is within the discretion of the commission (22 PUR3d 13). An Illinois judicial decision supported the view that the statutory authority of the commission to approve rate schedules embraces more than the authority to approve rates fixed in terms of dollars and cents. A rate schedule may contain provisions which affect the dollar and cents cost of the product sold. The commission was held to have statutory authority to authorize an automatic cost of gas adjustment clause (24 PUR3d 334).

The Ohio commission said that its responsibility in a rate proceeding en-

PROGRESS OF REGULATION

compasses the reasonableness of both the overall gross revenue and the rate schedules requisite to produce such revenues (27 PUR3d 66).

The Montana commission said that the establishment of initial rates, although a function of management, does not preclude the subsequent right of the commission to revise or restrain such rates after proper investigation (PUR1928E 803). The North Dakota supreme court said that the commission is not limited to an approval or denial of a rate proposal but may order any schedule of rates which will yield the utility a just and reasonable return (33 PUR3d 531).

Review of Current Cases

State Court Has Jurisdiction over Interstate Pipeline's Suits to Recover Overpayments to Producers

THE U. S. Supreme Court ruled that a Delaware trial court had jurisdiction to entertain suits by an interstate natural gas pipeline company, Cities Service Gas Company, to recover from gas producers overpayments resulting from a Kansas minimum price order which was finally held invalid. Only the question of jurisdiction was before the court in this proceeding.

Until the state minimum price order was invalidated, Cities Service paid the amount required by the order, over and above the existing contract price, in order to avoid the penalties provided by Kansas law for violation of the order. Cities Service made it clear to the producers, however, that it paid the higher, minimum price involuntarily and subject to its legal rights to recover the excess payments.

Contract Basis under State Law

The Delaware supreme court had sustained the jurisdiction of the state trial court, pointing out that the pipeline's claims were not founded upon any liability created by the Natural Gas Act, but upon a private contract deriving its force from state law. Against this view, it was argued that prices to be paid for natural gas sold

wholesale in interstate commerce must be in accordance with the rates filed with the Federal Power Commission. And since the pipeline's suits involved rates so filed, they must either be to enforce a filed rate or to challenge a filed rate. In either situation, it was said, the Natural Gas Act provides for jurisdiction in a federal tribunal, and state courts are deprived of jurisdiction.

But the party who brings a suit is master to decide what law he will rely upon, the high court observed. Cities Service demanded recovery on alleged contracts to refund overpayments in the event of a judicial finding that the minimum rate order was invalid, or for restitution of the overpayments which unjustly enriched the producers under the compulsion of the invalid Kansas order. No right was asserted by Cities Service under the Natural Gas Act. The suits were, therefore, based upon claims of right arising under state, not federal, law.

A case is not cognizable in a federal trial court, in the absence of diversity of citizenship, unless it appears from the face of the complaint that the determination of the suit depends upon a question of federal law. For this requirement, the court indicated, it is no substitute that the de-

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fendant is almost certain to raise a federal defense. Nor is it material that the plaintiff could have elected to proceed on a federal ground. If he decides not to invoke a federal right, his claim belongs in a state court. The rights asserted by Cities Service were traditional common-law claims and did not lose their character merely because there existed a scheme of federal regulation of interstate transmission of natural gas.

The producers gained no help from § 22 of the Natural Gas Act, which gives federal courts exclusive jurisdiction over actions to enforce liabilities and duties created by the statute. Such exclusive jurisdiction, said the court, is only for suits that may be brought in the federal courts. *Pan American Petroleum Corp. et al. v. Delaware Superior Court, in and for New Castle County*, 6 L ed 2d 584, 81 S Ct 1303.

8

Compensation Sufficiently Protects Employees Displaced in Rail Merger

THE U. S. Supreme Court held that compensation and not freezing of jobs meets the requirements of § 5(2)(f) of the Interstate Commerce Act, relating to railroad mergers and employee protection. As a condition of the commission's approval of a merger under the act, the commission must require a "fair and equitable arrangement to protect the interests of the railroad employees affected." For the length of time the employee has been employed, or up to four years, the approved transaction must not result in employees of the railroad being "in a worse position with respect to their employment." Upon the commission's approval of a merger with a condition for compensation to displaced employees, several parties sought an injunction against the order. Their complaint was dismissed and appeal was taken to the high court, which upheld the lower decisions.

History of Act Supports Commission

Appellants argued that no compensation plan is adequate unless it is based on the premise that all of the employees cur-

rently on the payroll remain in the surviving railroad's employ for at least the statutory period. They did not contend that each employee must retain his particular job, but that some job must remain upon for him.

The court found support in the legislative history of the statute for the view that compensation was contemplated and not a job freeze. The historical indications were apparently confirmed by events which followed the enactment. Immediately after the section was enacted, interested parties, including a union here appealing, expressed the opinion that compensation protection was the intent of the provision. The commission adopted this interpretation and has applied it in many cases. The court said it was unwilling to overturn a long-standing administrative interpretation of the statute, acquiesced in by all interested parties for twenty years, where congressional intent indicates that the administrative interpretation is correct. *Brotherhood of Maintenance of Ways Employees et al. v. United States et al.* 6 L ed 2d 206, 81 S Ct 913.

8

PROGRESS OF REGULATION

Expense Adjustments, Tapping Fee, and Penalty for Nonpayment Receive Commission Consideration

THE Louisiana commission authorized an increase in water rates after making various adjustments. Interest expense was eliminated because it is a payment for the use of capital and is not an operating expense. Depreciation was adjusted where the company charged a composite rate of about 10 per cent whereas the staff applied specific rates to each plant account resulting in a composite rate of 6.40 per cent.

The commission accepted this adjustment. Operating expenses were also adjusted by allocating certain joint operating costs to one area on a per customer basis.

Authority to increase a tapping fee to \$75 was disapproved. The company listed items of cost of making a tap amounting

to \$76.70 which included the meter, meter box, pipe, fittings, and labor. These items, the commission noted, are capital costs the same as the pipe and fittings in the distribution system and thus become a part of the rate base. It was the opinion of the commission that the portion of the cost of making a service tap that could not be recovered by salvage would not exceed \$35 and a tapping fee in that amount was authorized.

With respect to a penalty of 10 per cent for nonpayment of bills, the commission was of the opinion that this penalty would be sufficient to induce prompt payment of the majority of the bills, and that amount was authorized. *Ex Parte Nichols et al. Docket No. 8388, Order No. 8398, April 11, 1961.*



Pipeline Denied Right to Serve Industrial Users In Favor of Local Gas Company Service

ABSENT unusual circumstances, said the Federal Power Commission, an interstate pipeline company will not be authorized to construct duplicative facilities in order to serve an industrial customer located in the service area of a local distributing company, where the latter is willing and able to provide adequate service to the customer with accompanying benefits to the customer and without detriment to the pipeline company. The commission denied such authority to Southern Natural Gas Company, which proposed to install additional compressor facilities and serve two industrial customers in Savannah, Georgia. A local distributor, South Atlantic Gas Company, is served by Southern in Savannah.

The commission decided, affirming the

examiner, that the public convenience and necessity would be served best by having South Atlantic rather than Southern make the sales to the industrial customers.

Accordingly, Southern will be permitted to install the compressor facilities and deliver additional gas to South Atlantic for resale to the two customers.

The holding in this case does not mean that the distributor in all cases, rather than the pipeline company, should be permitted to make proposed industrial sales. The commission said it would continue "to consider each case on the merits as it arises and make the determinations which are commensurate with the facts and law applicable thereto." *Re Southern Nat. Gas Co. Docket No. G-19632, May 4, 1961.*

Trended Cost Evidence Essential to Fair Value And Promotion Expenses Held Allowable

THE North Carolina supreme court ruled that evidence of replacement value, consisting substantially of trended original cost, should have been considered by the commission in determining a fair value rate base for Piedmont Natural Gas Company. While the commission purportedly accorded this evidence "minimal" consideration, the court found that the commission had in fact disregarded it and had fixed a rate base only slightly above depreciated original cost. The court did not undertake to say what weight should be given this evidence but declared that it should be "weighed fairly in balanced scales." To give it minimal consideration only, constituted an error of law.

The lower reviewing court found, as Piedmont claimed, that the commission's rate base figure was the result of a calculation, using the company's net profit for the test period, and 6 per cent as a fair return. In any event, the high court decided that the rate base fixed by the commission was without evidence to support it. Although 6 per cent was allowed as a reasonable return, the court pointed out that such a percentage is meaningless until it is translated into dollars and cents on the basis of a fixed amount of money—the rate base.

Trended Cost Is Useful Guide

In these times of increased construction costs and decreased dollar value, said the court, trended cost evidence deserves weight in proportion to the accuracy of the tests and their intelligent application. It is a useful measure for fixing the present value of facilities which were constructed when costs were low and which can be replaced only at relatively high cost. Trended cost takes into account the

type of facility, its age, its original and replacement cost, terrain, location, its probable useful life, and other factors.

Although such evidence is not conclusive, it is a useful guide in determining value of facilities; most of which are not open to visual inspection. Through investigation and experience engineers and accountants have devised tables, studies, and indices as guides in translating original cost into present value. A better method, without minute underground examination, is not suggested, the court noted.

End-of-period Rate Base

In establishing the rate base, the commission used the average net investment for the test year. Since rates are prospective, the court indicated, the base should have been determined as of the date the rates became effective. Because the company is growing, its investment was greatest at the end of the test year. Investment at that time, therefore, should have been accepted rather than the average for the year.

Promotion Expenses

Even though the commission expressly recognized the high quality of the company's management, it sharply reduced the actual promotion expenses for rate-making purposes, apparently on the ground that the percentage expenditure was in excess of the national average for companies retailing natural gas. No effort was made, the court noted, to ascertain the expenditures by companies in Piedmont's class or in its territory. In 1952 the company changed over from manufactured to natural gas. All customers had to be sold on natural gas, and new ones had to be won. Competition with elec-

tricity and oil had to be met. Furthermore, Piedmont is rapidly expanding its facilities and faces promotion in a new field. It is doubtful, therefore, the court declared, whether evidence of the national average should have been admitted at all. The average of companies in Piedmont's own class, however, would be admissible.

Remand to Commission

The proceeding was remanded "for such further study and up-to-date findings as will enable the commission (1) to find

the fair value of Piedmont's facilities; (2) to ascertain its operating expenses, including capital consumed; (3) to fix such rate of return on the investment as will enable Piedmont by sound management to pay a fair profit to its stockholders and to maintain and expand its facilities and services in accordance with the reasonable requirements of its customers in the territory covered by its franchise." *North Carolina ex rel. Utilities Commission v. Piedmont Nat. Gas Co.* 119 SE2d 469.



Gas Producer Is Denied Commission Help In Quest for Additional Sales

THE Federal Power Commission denied an application by Deep South Oil Company of Texas seeking "relief" under three alternate proposals: (1) permission to abandon service to Texas Gas Corporation from the North Big Hill area in Texas; (2) issuance of a certificate to serve an additional buyer; or (3) issuance of an order requiring Texas Gas to take greater volumes of gas. Texas Gas is the sole purchaser of gas from the producing properties here involved.

Deep South contended that it is confronted with a financial emergency due to its present inability to market sufficient volumes of gas to secure a satisfactory return on its investment. It indicated that the grant of the abandonment proposal or the other requests would enable it to increase the volumes of sales from the Big Hill acreage from the present 7,000 Mcf daily to 25,000 Mcf. Sales of the latter magnitude were said to be necessary to the producer's economic survival.

Essential Proof Lacking

Section 7(b) of the Natural Gas Act permits the abandonment of service only if the available supply of natural gas is

depleted or if the present or future public convenience and necessity permit abandonment. Deep South did not allege exhaustion, and no sufficient showing was made to support a finding that the public convenience and necessity would permit abandonment. Nor did the record show that Deep South or its Big Hill operation was experiencing economic difficulties to the point where the producer's economic existence was threatened.

Deliveries Unchanged

The proposal for a new or supplemental certificate involved the certification of a sale of dedicated gas to an intra-state purchaser. The commission cannot grant such authority under the Natural Gas Act.

Although Deep South contended that it contemplated merely "exempting" a portion of its dedicated gas reserves from service to Texas Gas, the commission pointed out that this would constitute a partial abandonment of service to Texas Gas without justification as required by the statute.

Nor was any basis found for requiring Texas Gas to take greater volumes of gas

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from the North Big Hill properties, as proposed by Deep South. Texas Gas indicated that, in view of its ratable take obligations to all producers as a common purchaser under Texas law, its existing facilities could not handle any greater volumes from Deep South. This position was supported by a permanent injunction issued by a Texas court prohibiting Deep South from delivering to Texas Gas more than 7,000 Mcf daily until requested by the pipeline to deliver more. The injunc-

tion was based upon a finding that Texas Gas' present system capacity could not safely accommodate greater volumes from Deep South. The commission considered that it was bound by this judicial determination. Moreover, it was observed, the commission has no authority under the Natural Gas Act to require Texas Gas to enlarge its capacity to take additional volumes of gas. *Re Deep South Oil Co. of Texas, Docket No. CI60-263, April 14, 1961.*



Exemption from Motor Vehicle Regulation Applies to Persons and Not to Vehicles

THE Louisiana commission ordered the operator of motor trucks to cease and desist from further operations until he had first applied to and received from the commission appropriate authority under the Motor Carrier Act. He was domiciled in Shreveport and was engaged in the business of gathering small shipments consigned to Alexandria and other points, tendering them as one shipment to a certificated motor carrier, and then distributing them to the several consignees at the destination point. His profit was derived from the difference between the rate on each individual small shipment and the volume rate accorded it when all of these shipments were tendered to the carrier at once.

He argued that each individual vehicle owned by him operated in only municipality and was therefore exempted from the provisions of the act, under a clause which exempts persons operating vehicles only within seven miles of the incorpo-

rated municipality in which they are domiciled. This, said the commission, might possibly be true if the exemption applied to the vehicle but the exemption applied to the person operating the vehicle or vehicles. Since he operated vehicles in more than one incorporated municipality, his operation was subject to the act's provisions.

The commission said it must be understood that the Motor Carrier Act does not regulate vehicles but regulates "persons operating vehicles" for hire. Thus, when the commission issues a certificate the certificate does not pertain to any particular vehicle or vehicles; it confers a right upon a specific person to operate motor vehicles for hire over the highways. The exemption does not refer to specific vehicles but on the contrary refers to "persons engaged in operating." *Louisiana Pub. Service Commission v. Paulette, Docket No. 8530, Order No. 8435, May 9, 1961.*



Artificial Monopoly Not in Public Interest

THE New York commission, in denying a petition for rehearing of an

application by a railroad subsidiary for a motor carrier certificate to transport

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bulk cement, made it clear that the presentation, by direct and specific testimony, of proof that the shippers of the commodity desired the service and that there was a reasonable basis to conclude that there was a need for additional service in quantity or quality not available from existing certificated carriers was only one method of establishing public convenience and necessity. It is not the only method, and certainly would not be set up as a barrier to preclude the remedying of an extraordinary situation.

Nature of Monopoly

The industry practice was for existing shippers of cement to include the transportation charges in the price of their product to their consignees and to preempt unto themselves the right to select the particular carrier to handle the transportation. Existing carriers each haul for a particular shipper and no other, and the shippers utilize the services of a particular carrier and no other.

This produced a novel situation where some few carriers had entered upon a newly inaugurated transportation service and obtained common carrier authority, though in practice they served but a single shipper. Strict adherence to ordinary methods of proof, accordingly, would result in a "closed shop"—in the establishment and continuance of a complete monopoly for the sole benefit of existing carriers, the commission noted.

The existing shippers, satisfied with the prevailing arrangements and practices which enable them to control the delivered price of cement, would have no occasion to support an application by a new carrier proposing to enter the business. Concomitantly, the consignees would be unable to furnish the customary specific testimony of present need of additional service, because of their complete exclusion

of any voice whatever in the selection of the carrier to carry their purchased products.

Evidentiary Methods

The commission did not think that such an artificially created monopoly in a new area of public transportation was in the public interest. Simply because the ordinary testimonial methods of proving public convenience and necessity were not available to a new applicant, the commission was not required to exclude a responsible new carrier from the area.

Customary methods of establishing public convenience and necessity are of probative value only where truly flexible and competitive common carrier operations are practiced; *i.e.*, where carriers in practice and in fact are available for the service of any shipper (or consignee, if he pays the freight), and where the latter in practice and in fact are able to exercise the prerogative of selection among various competing, qualified carriers. The customary methods, thought the commission, had no supervening probative effect in the present artificial "closed shop" situation.

Following the Traffic

The records showed that the rail traffic in bulk cement had been steadily dwindling. Concomitantly, the trucking of cement had been steadily growing. The existing carriers contended that the railroad had no right to "follow the traffic." The commission agreed, but pointed out that its decision did not rest upon such right. The railroad was not precluded from endeavoring to follow the traffic by the inauguration of truck service through a subsidiary, if there was a reasonable basis for concluding that the addition of a new carrier would or might serve the public interest, convenience, and necessity.

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Although the consignees of bulk cement had been deprived by the shippers (who utilize the protesting carriers) of their prerogative of selecting the haulers of the cement which they purchased, and so could not affirmatively state that they presently required and would use the services of the applicant, the commission thought that their general testimony and support of the application warranted the conclusion in that they would avail themselves of the applicant's services if they were available. Moreover, the practices of the existing carriers in tailoring their services to the individual shippers with whom they had existing arrangements indicated that their services were not readily or immediately available to the general public.

Monopolistic Rights

There was a further principle involved, the commission thought. When a new area of motor truck transportation opens up, as it has done in this field, the first applicants who obtain authority in the area are not entitled to monopolize it. Unlike other utility services which are not generally subject to duplicative com-

petition, motor carriers operate in an industry where duplicatory services are readily available, the commission said. They are not so strictly regulated as the monopoly services, because they are not natural monopolies.

Nor is a complete monopoly in any portion of the bulk cement field desirable or in the public interest. While destructive competition is to be avoided in the interest of maintaining an efficient and stable transportation service (for the public—not just private benefit) some competition is desirable and in the public interest. Complete monopoly is not. The commission thought that the circumstances made it in the public interest that services of the applicant as an additional carrier, freely and fully available to all segments of the public, both the shippers and the consignees (present and prospective) be added to those of the existing carriers. So far as it had appeared, the applicant had no ties to any particular shipper or consignee. This, far from being a reason for denying the application, was a reason for granting it. *Re New York Central Transport Co. Case MT-6809, May 23, 1961.*



Railroad Subsidiary Not Allowed to Purchase Permit When Service Is Dormant

An application by Milwaukee Motor Transportation Company, a subsidiary of Chicago, Milwaukee, St. Paul and Pacific Railroad Company, for authority to purchase the intrastate authority in a class B motor carrier permit owned by Wales Trucking Company of Dallas, Texas, was denied by the South Dakota commission. The permit had originally been issued without hearing and without findings as to public convenience and necessity and had been renewed from year to year. The traffic in-

volved was the movement by truck of heavy hauling for which special equipment, by reason of the size or weight thereof, is required. Interstate commerce was not involved. Several motor carriers and Chicago and North Western Railway Company opposed the transfer.

Milwaukee is a large motor carrier operating in several states, and its service is co-ordinated with, auxiliary to, and supplementary of its parent, the Milwaukee Railroad. Its proposal was to operate unrestricted statewide in South

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Dakota. Wales had held the conditional operating authority since May 7, 1952, but had never established or operated an intrastate motor carrier business in South Dakota. It had suspended and ceased operation without first obtaining the authority of the state commission.

Authorized motor carriers operating statewide had acquired expensive equipment and were conveniently located in different parts of the state. The commission found that the intrastate service

under the permit had not been used for several years; that the service of the several motor and rail carriers of heavy commodities occupying the field was ample and adequate; that inauguration of a new and different service would result in the diminution of the present carriers' traffic and revenue and be detrimental to them; and that the transfer of the permit was not consistent with nor would it promote public interest. *Re Milwaukee Motor Transp. Co.* 8623-B, May 25, 1961.



Rates Fixed for Colored Telephones and Other Special Subscriber Equipment

THE Nebraska commission refused to grant the Stanton Telephone Company a monthly charge, in addition to the regular main station or extension rate, for colored telephones and Ericofon. It authorized an installation charge of \$7.50 in addition to the regular connection charge for the first such telephone and \$5 for each additional one on the same premises at the same time.

Rates for other special equipment were authorized as follows: lighted dial telephone, 25 cents monthly in addition to the regular rate; hard-of-hearing telephone, \$2 per month in addition to the regular rate; and hands-free telephone, \$5 per month in addition to the regular rate. Regular charges for connection, change of instrument, and inside moves were prescribed.

For automatic answering service only,

the commission approved a monthly rate of \$8, with an installation charge of \$10, and an inside move charge of \$5; for automatic answering and recording, a monthly rate of \$15, an installation charge of \$15, and an inside move charge of \$5; for automatic answering and recording with remote call back, a monthly rate of \$22, an installation charge of \$20, and an inside move charge of \$5.

In connection with the provision of automatic answering and recording facilities, the subscriber must indemnify and save the company harmless against all claims arising from the material transmitted over the facilities. This includes claims for libel, slander, fraudulent or misleading advertisements, infringement of copyright, or any other claims. *Re Stanton Teleph. Co.* Application No. 22842, May 24, 1961.



Fire Hydrant Charges Must Be Fairly Allocated

THE New Jersey commission, in approving a proposed charge of \$25 per year for each public fire hydrant in service in a municipality plus an annual inch-foot charge, said that it should be borne

in mind that the extra cost of furnishing fire protection service is due largely to the fact that the total plant cost is substantially greater than it otherwise would be if the plant were designed only for the

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purpose of furnishing domestic service. This reflects such items as increased pumping capacity, increased size of mains and storage facilities, as well as costs associated with the installation of hydrants.

A large part of the plant in any town where fire protection is furnished is simply held in readiness for that purpose. The question of cost of fire service is,

therefore, one of fair and just distribution of total fixed and operating costs between the taxpayer who pays the fire protection charges and the customers who pay other bills for water service. If the amount paid for fire service is too low, the water consumer bears a part of the burden which should be properly borne by taxpayers. *Re Berkeley Water Co. Docket No. 611-68, June 6, 1961.*



Review of FPC Area Price Levels for Gas Denied

LACKING jurisdiction under the Natural Gas Act, a federal appeals court dismissed a petition by the state of Wisconsin and the Wisconsin commission for review of the Federal Power Commission's recent Statement of General Policy No. 61-1 (35 PUR3d 195). The statement announced price levels for natural gas in various areas to serve as guides in future certification proceedings involving independent natural gas producers. It denies or conditions certificates if prices are higher than those established in the statement. The commission has rejected a petition for rehearing on the ground that the statement is not a final order.

In seeking review, the petitioners alleged that the statement was issued without notice to petitioners, and without affording them an opportunity to present evidence or to challenge the commission's factual bases, which are not contained in any specific record. They argue that the statement will inevitably deprive Wisconsin consumers, and others, of the protection intended by the Natural Gas Act, for, they say, it will encourage producers to raise their rates to the maximum levels permitted by the statement. Moreover, they argued, a consumer challenging a particular rate will be compelled to proceed under § 5 of the Natural Gas Act, which involves delay, less hope of success,

and no recovery of payments during the pendency of the proceeding.

Jurisdictional Prerequisites

The court ruled that it has no jurisdiction in this proceeding under the Natural Gas Act. In order to invoke the court's jurisdiction under § 19 (b) of the act, it was pointed out, a petitioner must demonstrate that it was a "party to a proceeding"; that it is "aggrieved"; and that the cause of its aggrievement is an "order."

But petitioners were not parties to the proceeding before the commission, within the meaning of the statute. They contended, nevertheless, that they were aggrieved and that the action in question was a final order. Since the court decided that they were not parties, jurisdiction was defeated, and it was unnecessary to decide whether they were aggrieved and whether the order was a final one.

Not all orders of the commission were made reviewable, the court noted. Absent an order of a definitive character dealing with the merits of a proceeding before the commission and resulting from a hearing upon evidence and supported by findings appropriate to the case, the court cannot entertain an appeal.

Other Jurisdictional Basis Rejected

It was urged that jurisdiction could be

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rested upon § 10 of the Administrative Procedure Act.

The appeals court held, however, that this act adds nothing to its jurisdiction under the Natural Gas Act. The court is not a "court of competent jurisdiction" in the instant appeal, and nothing in § 10

purports to make it so. That section merely make injunctions and certain extraordinary legal remedies available in a proper action instituted in a court of original jurisdiction, the court explained. *Wisconsin et al. v Federal Power Commission*, No. 16,118, May 18, 1961.



Subsidiary Authorized to Issue 25-year Debentures at Competitive Bidding

THE Securities and Exchange Commission approved, without conditions, the proposed sale by Pennsylvania Electric Company, at competitive bidding, of \$12 million of unsecured 25-year debentures. Pennsylvania Electric is a subsidiary of General Public Utilities Corporation. The proceeds of the sale, plus the proceeds from the company's recent sale of \$10 million of first mortgage bonds, will be used to reimburse the company's treasury for construction expenditures and for the satisfaction of short-term notes issued for the same purpose.

Imposition of Conditions

The sale of the debentures was solely for the purpose of financing the company's business. Furthermore, the commission of the state of Pennsylvania, the state in which the company was organized and doing business, had expressly authorized the sale. In view of these facts, the Securities and Exchange Commission said that the sale must be exempted from the provisions of § 7 of the Holding Company Act, subject to the imposition of such conditions as it might deem appropriate in the public interest or for the protection of investors or consumers.

In considering the nature of any terms or conditions which it might impose, the commission said that it was required to give weight to the decision of the state

commission and that it could impose conditions only to the extent that the sale offends the basic standards and policies of the Holding Company Act and thereby creates the likelihood of those abuses which led to the act's passage. In effect, this means a greater degree of latitude is permitted in applying the standards and policies of the act to a security examined and approved by a state commission and entitled to a § 6(b) exemption than to an issue subject to all provisions of § 7. But, said the commission, where there is a material variance from those standards and policies, it has a responsibility, despite state approval, to impose appropriate terms and conditions.

Capital Structure and Earnings Coverage

In addition to the debentures and first mortgage bonds, the company also had recently sold some common stock to its parent company. The three transactions were considered as an integral proposal in considering the financial effect of the financing program upon the subsidiary and the holding company system. The pro forma capital structure reflecting the financing program showed 55.2 per cent debt, 11 per cent preferred stock, and 33.8 per cent common equity.

The gross income of the subsidiary and its subsidiary companies, after taxes, for the calendar year 1960, restated on a pro forma basis, as though the new

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securities had been outstanding for the full year, and to reflect the proposed payment of short-term notes, amounted to 3.62 times the pro forma annual interest requirements on the first mortgage bonds, 3.35 times the pro forma annual interest requirements on the bonds and debentures, and 2.72 times the pro forma annual interest and dividend requirements on all debt and preferred stock.

The consolidated capitalization ratios of the holding company and its domestic subsidiaries, after giving effect to the financing proposals, would amount to 52.6 per cent debt, 9.4 per cent for preferred stock, and 38 per cent for common stock equity. Gross income of the holding company and its domestic subsidiaries, after taxes, calculated on the same basis, would be 3.23 times the annual interest requirements on all domestic system debt and 2.68 times the annual interest and dividend requirements on all domestic system debt and preferred stock. The commission concluded that the capitalization ratios, both as to the subsidiary and as to the holding company system, were acceptable and that the earnings coverages were adequate.

Debenture Indenture Provisions

The indenture contains various protective provisions, including a 2 per cent annual cash sinking fund which will retire 48 per cent of the debenture issue prior to maturity; a limitation on common stock dividends equal to that in its first mortgage indenture; a limitation on indebtedness maturing within one year to not more than 10 per cent of its capitalization, including surplus, unless permitted by the commission on application by the company; and as a condition to the issuance of long-term debt, an overall interest coverage of two times before federal income taxes.

The indenture also provides that, so long as any of these debentures are outstanding, the company will not, without commission approval, incur any additional long-term debt if it would result in an aggregate long-term debt in excess of 65 per cent, or if the common stock equity would be less than 30 per cent of total capitalization.

Type of Security Issue

The subsidiary claimed that sound business considerations dictated that first mortgage debt be substantially less than 60 per cent of total capitalization, including surplus, "both in order to preserve bonding capacity for possible future emergency capital requirements and to maintain favorable bond ratings." It therefore did not propose to issue additional first mortgage bonds at this time.

It had also considered the advisability of issuing preferred stock, but concluded that such stock was an uneconomical method of raising capital under the present income tax rates. It noted that interest payments on debt securities are deductible for federal income tax purposes but dividend payments on preferred stock issued to raise new capital are not. Consequently, one dollar of new preferred stock capital imposes a revenue requirement which is more than twice that of debt capital.

The commission recognized that the cost of capital and related income taxes to a company issuing debt is generally less than that of issuing preferred stock. Nevertheless, it noted that the deductibility for tax purposes of interest on debt capital should not be employed as a basis for permitting an excessive debt ratio, since the stock equity of a company should be sufficient to enable it to withstand economic adversity.

The company represented in its appli-

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cation that it would abandon any further issuance of preferred stock unless conditions not now contemplated change so radically as to require reconsideration of this policy. Furthermore, General Public Utilities and its various subsidiary companies expect to give early consideration to the feasibility of retiring the system's outstanding preferred stock. In view of these representations, and in light of the capitalization ratios and earnings cover-

ages of both the subsidiary and the holding company system, the commission deemed it unnecessary to consider what terms or conditions might appropriately be imposed if it had concluded that the creation of the additional layer of permanent securities was a material variance from the policies and standards of the act. *Re Pennsylvania Electric Co. File No. 70-3951, Release No. 14451, May 25, 1961.*

Other Recent Rulings

Underwriters' Compensation. On unsubscribed common shares offered to underwriters, pursuant to Federal Power Commission authorization of an electric company stock issue, the compensation of the underwriters would be fixed by competitive bidding. *Re Interstate Power Co. Docket No. E-6985, May 2, 1961.*

Exemption from Competitive Bidding. The Federal Power Commission exempted from competitive bidding a proposed offering of common stock to existing stockholders, with provision for unsubscribed shares to be underwritten by the highest of three bidders. *Re Northwestern Pub. Service Co. Docket No. E-6987, May 4, 1961.*

Notice of Fuel Clause Proposal. An electric company which proposed to apply a fuel adjustment clause was directed by the North Carolina commission, after suspension of the clause, to give notice of hearing on the matter to all affected consumers. *Re Carolina Power & Light Co. Docket No. E-2, Sub 70, May 15, 1961.*

Review Jurisdiction. An order of the Federal Power Commission granting cer-

tain interests affiliated with the coal industry a limited right of intervention in a gas rate proceeding is not a final order and, therefore, not subject to review, a U. S. appeals court ruled. *Northern Nat. Gas Co. et al. v Federal Power Commission, 288 F2d 441.*

Liability for Water Line Repair. An Illinois appellate court held that a property owner was liable for the cost of repairing a broken water line to his premises, rather than the city which furnished water service, where the customer had signed an application containing a contractual guaranty of water bills and was subject to an ordinance requiring property owners to maintain service pipes. *Rosborough v City of Moline et al. 174 NE2d 16.*

Exchange Boundary Changed. An established exchange area boundary line between two telephone companies was found unreasonable and impracticable by the Missouri commission because of the topography of the land and the formation of a new lake in the area, and the line was therefore modified so as to grant a request by complainants for service from the company of their preference,

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considering that such company could provide adequate service at a cost substantially less than that which another would incur in providing similar service. *Re Modern Teleph. Co., Inc. Case No. 14,432, May 1, 1961.*

Exchange Boundaries. That the community of interest of certain telephone users does not coincide with the particular exchange serving them and that such users are served by one exchange and their neighbors by another does not alone result in undue discrimination against anyone, the Missouri commission pointed out, since established boundaries should not be disturbed except for unreasonableness or a profession by the utility concerned to serve beyond its established boundary. *Lampton et al. v Southwestern Bell Teleph. Co. Case No. 14,083, May 10, 1961.*

Agency Station Retained. Since the discontinuance of a railroad agency station is an inconvenience to the shippers in the station area, said the Missouri commission, it should not be discontinued unless it is not used sufficiently to be sustained as such, or unless the trend is toward increased losses which would have a harmful effect on the overall economic operation of the railroad. *Re Missouri P. R. Co. Case No. 14,524, May 10, 1961.*

Electric Company Stock Split. The El Paso Electric Company was authorized by the Federal Power Commission to issue additional common stock for a two-for-one split in view of the company's purpose to establish the price per share at a market level more attractive to new investors and thereby to broaden the interest in the company's stock. *Re El Paso*

Electric Co. Docket Nos. E-6994, E-6933, May 11, 1961.

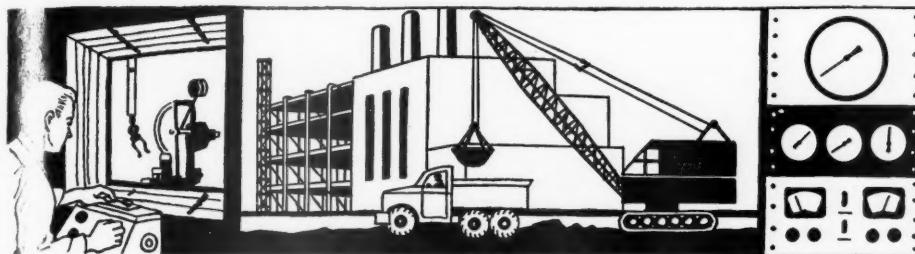
Transit Merger. The Missouri commission authorized a reorganization and merger of a transit company upon a showing that the plan would improve the financial position of the utility while insuring unimpaired service, and would permit the stockholders to diversify the business and realize some return on their investment. *Re Kansas City Transit, Inc. et al. Case No. 14,664, May 11, 1961.*

Gas Gathering Costs. Gathering and other similar service charges of natural gas producers, the Federal Power Commission observed, have been consistently considered as part of the producer's total rate. *Re Republic Nat. Gas Co. Docket No. RI61-422, May 12, 1961.*

Evidence by Reference. In a gas producer rate case, the Federal Power Commission sustained the examiner in incorporating, by reference to the record, testimony on rate of return which had been presented in a prior proceeding in which the same producer had full opportunity to cross-examine the witness, considering that the relevancy and materiality of the testimony were not questioned. *Re United Gas Pipe Line Co. et al. Docket Nos. CP60-36, CI60-43, CI60-142, May 19, 1961.*

Effective Rate to Be Collected. The Federal Power Commission refused a request by a natural gas producer to accord "effective" status to a rate increase without requiring that the higher rate be collected and that security be filed for possible refund pending final determination. *Re Helmerich & Payne, Inc. Docket No. RI60-342, May 19, 1961.*

Industrial Progress



Gas Heating Customers Increased 1.2 Million in 1960

More homes are being heated with gas in the United States than ever according to the American Gas Association, which reports that national 3,171,000 customers installed gas heating last year. There were 21,352,000 customers with gas at the close of 1960, an increase of 5.8 per cent over the previous year, according to AGA's gas househeating survey. The survey predicted that in the year period ending in 1963, more than 3,504,000 new gas heating users will be added.

Gas customers accounted for 62 per cent of the installations of gas in 1960. The remaining 38 per cent made conversions from other forms of heating in existing dwellings. The AGA survey made this percentage breakdown nationally and for the first time.

It was noted there was no national trend, and that in some areas conversions outnumbered new installations. For example, in the East North Central Region, which experienced the greatest growth both in absolute number and in percentage, 61 per cent of installations were in existing houses. This region, which includes Indiana, Michigan, Ohio and Wisconsin, added 387,000 gas househeating customers in 1960, bringing the total to 4,594,000.

Contraction in the Pacific region, which includes Alaska, California, Nevada, Oregon and Washington, ranks second in the number of users added, 93 per cent of installations were in new homes. This had a total of 196,000 installations, but 14,000 of them in new houses. There are now 4,360,000 gas users in the region with gas heat. Jersey, New York and Pennsylvania, which make up the Middle Atlantic Region, experienced the third

greatest gain. In those states, the distribution between new homes and existing homes making installations was much closer than in the other two regions. Newly-built homes accounted for 58 per cent of gas heating installations and existing dwellings 42 per cent. The installations added in the region were 152,000, bringing the total number of customers in the three states to 2,523,000.

Of the total number of residential customers of gas utilities, 69 per cent used gas for heating in 1960, compared to 67 per cent the previous year.

AGA estimates that in 1961, 1962 and 1963 a total of 2,377,000 homes will install gas heating and 1,187,000 existing houses will convert to gas. These figures refer to the number of customers, not the sale of heating units, since some dwellings may have more than one piece of gas heating equipment, especially in the case of the direct space heaters, floor furnaces or vented recessed wall heaters.

New IBM "SURE" Program Reduces Computer Installation Costs

A NEW computer technique for customer billing, which helps bring the advantages of high-speed data processing to public utilities with a substantial reduction in machine installation costs has been announced by International Business Machines Corporation.

SURE (for Symbolic Utilities Revenue Environment) is a computer program that can be tailored easily by individual companies to meet their billing requirements. The program is applicable to both gas and electric utility accounting procedures. It is available, without cost, to customers of IBM's Data Processing Division.

Utilities using SURE will be able to realize the benefits of data processing more rapidly than in the past and

speed the recovery of installation costs by reducing the time required for programming. Several utilities have begun implementing the program prior to the installation of IBM solid-state computers.

Written for the IBM 7070 data processing system, SURE also can be used with the fully-compatible IBM 7074. The latter system is twice as fast as the 7070 in processing business data and up to twenty times as fast in scientific computation. SURE programs also are being written for the IBM 1401 and 1410 data processing systems to meet the needs of utilities with smaller billing volumes.

SURE was developed by IBM systems engineers and utility specialists after a two-and-one-half-year study of the billing practices of utility companies throughout the country. It contains approximately 40,000 computer instructions, incorporating the basic billing techniques common to all utilities.

By providing a utility with the framework of a ready-made billing program, SURE can pave the way for the company's conversion from manual or punched card billing methods to computer-based techniques.

The Brooklyn Union Gas Company, which will install an IBM 7074 late in 1961, is one of the firms which have begun to put SURE into operation. Brooklyn Union expects the 7074 to be handling its entire customer billing procedure—for more than 1,200,000 meters—by mid-1962.

Irving Trust Company Expands Headquarters Building

IRVING Trust Company announces plans to expand its One Wall Street Headquarters Building to occupy the entire Broadway block from Wall Street to Exchange Place.

In announcing this action, George A. Murphy, Chairman of the Board,

(Continued on page 16)

INDUSTRIAL PROGRESS—(Continued)

referred to Irving's dynamic growth, and said that "the bank's deposits had risen twice as fast in the last decade as the New York average. Studies of future growth trends indicate that the bank will soon outgrow its Headquarters Building. Therefore, it is planned to construct a major addition to One Wall Street." It is expected that the new addition will be completed in early 1964.

New Brochure on Gas Cleaning, Air Pollution Control Equipment

THE latest techniques and equipment for air pollution control are presented in a new 12-page, illustrated brochure published by Research-Cottrell, Inc., manufacturer of industrial gas cleaning equipment.

New air-cleaning precipitators for nuclear subs, automated controls, and high-efficiency silicon rectifiers are shown as recent products of the modern research, design and manufacturing facilities available at Research-Cottrell.

Recent installations of high-performance gas cleaning equipment in key industries, including electric utilities, are also given.

Research, laboratory, testing and service facilities available to customers are also listed and described.

Copies of bulletin 500 "This Is Research-Cottrell" may be obtained by writing to Research-Cottrell, Inc., Bound Brook, New Jersey.

Philco Holds Seminars On Data Processing

A BI-MONTHLY series of management seminars titled an 'introduction to data processing' will be held at the Willow Grove plant, Computer Division, Philco Corporation, from June through December 1961, Cliff Leventhal, manager of customer education, has announced.

There is no charge for attendance at these sessions. Detailed information on this seminar series, and any other information on Philco 2000 training programs, is available by writing the Marketing Department, NP, Philco Computer Division, 3900 Welsh Road, Willow Grove, Pa.

ARKLA Enters Gas Generation Unit Fabrication Business

THROUGH a subsidiary company, Arkansas Louisiana Gas Company will enter the manufacture and fabrication of gas power generation equipment.

W. R. Stephens, Little Rock, Ark., president of Arkla, said that Arkla Air Conditioning Corp., a wholly-owned subsidiary, had agreed to purchase most of the assets of the Ingersoll Corp. of Shreveport, which has been a leading dealer and fabricator of natural gas engine-driven generation assemblies for oil field, small municipal and other uses.

Mr. Stephens said the new division of Arkla will expand the gas company's emphasis regionally and nationally on the rising use of gas-operated engine units for independent production of electric power by commercial and industrial consumers, such as shopping centers, motels, saw mills, cotton gins, stores, office buildings and others.

New Flexible Flanged Coupling Folder

"FLEXIBLE Flanged Coupling Adapters" is the subject of a new 12-page, 2-color brochure just issued by Smith-Blair, Inc. The catalog gives detailed information on how these fittings can be incorporated into the design of water, sewage, or gas systems or used for "cutting-in" flanged fitting installations in existing pipelines. Design drawings show how these products enable flanged meters, valves, regulators, etc. to be quickly and easily installed or removed, have flexibility, and occupy smaller space.

Copies of Catalog No. 1255 may be obtained from Smith-Blair, Inc., 535 Railroad Avenue, South San Francisco, California.

New Georgia Power Plant to Be Named in Honor of Harlee Branch

THE new steam-electric plant being built by the Georgia Power Company on Lake Sinclair in Putnam county will be named in honor of Harlee Branch, Jr., a director and a former president of the company and now president of The Southern Company.

John J. McDonough, president, Georgia Power Company, who made the announcement, said the decision to name the plant in honor of Mr. Branch was voted unanimously by the company's board of directors.

The new power plant is slated to have a generating capacity of between one and a half and two million kilowatts. Plans for the plant were announced in March. Actual construction of the first 250,000-kilowatt gen-

erating unit is scheduled to begin in 1962.

Mr. Branch served as president of the company from 1951 to 1956. Earlier he served Georgia Power Company as vice president and general manager.

Westinghouse Guide Highlights Advantages of Circuit Breakers

COSTS, sizes, installation and features of circuit breakers and safety switches are described and illustrated in a pocket-sized company guide now available from Westinghouse Electric Corporation, Switch Control Division, Beaver, Pa. The page booklet highlights advantages of AB-I circuit breakers.

Copies of the booklet may be obtained by writing: Westinghouse Electric Corporation, Standard & Wilcox Control Division, Beaver, Pa.

Fuel Core For Con Edison Nuclear Electric Power Station Undergoes First Chain Reaction

THE nuclear power core—valued at \$22,000,000—for the nation's first stationary atomic electric generating station being built by the Consolidated Edison Company at Indian Point, New York, has achieved its first sustained reaction at the Babcock & Wilcox Company Atomic Energy laboratory, it was announced recently.

According to B&W spokesman, the criticality test, conducted at the company's Lynchburg, Va., laboratories, confirmed all nuclear and engineering calculations. In addition, it provided vital experience in painstaking coreloading procedures which will be carried out when the elements are delivered to the Indian Point site later this year. Once stalled, the core is expected to last for about two years without reprocessing.

The test was a pioneering accomplishment in that it was the first full-scale power reactor core with a mixture of thorium and uranium oxides had ever been "taken" to criticality. The Con Edison station itself will have the added distinction of being the first to utilize the thorium-232 combination as fuel.

Three million pellets, each one quarter by three-quarters of an inch, make up the core's fuel charge. Weighing approximately 40 tons, the assembled core of fuel elements stands

INDUSTRIAL PROGRESS—(Continued)

high and measures more than 6 feet across. It comprises 120 fuel elements and 2 control rods, plus associated internal "hardware."

At the top, the core was installed 17 feet high in tank 9 feet in diameter. More than 10,000 gallons of purified, de-ionized water was used to fill the tank before the core was brought to criticality.

Now nearing completion, 24 miles from New York city on the east bank of the Hudson River, the Con Edison Indian Point Station will be capable of producing 275,000 kilowatts of power. Part of its total output will come from routing the steam generated by the reactor system through a conventional oil-fired superheat cycle before it reaches the turbogenerators. The nuclear portion of the station was designed and built by The Babcock & Wilcox Company. Working in co-operation with Con Edison, members of two B&W divisions located in Lynchburg teamed up to design and produce the reactor core.

Leask, McCoy Join Zinder Organization

Former administrative officer of the City of Los Angeles, Samuel Leask, Jr., and the assistant administrative officer, William McCoy, have joined the national consulting firm of Zinder & Associates, Inc.

Leask will become director of Mr. McCoy managing director of Zinder Pacific Southwest division with offices in Los Angeles and San Francisco.

Two city executives indicated in their new positions they will specialize in counseling business, industrial and local government on fiscal, budgetary and operational matters, as well as carrying the broad consulting services of the Zinder organization.

Zinder & Associates, Inc. is engaged in engineering, economic and management consulting work.

Chesapeake and Potomac Co. Plans \$4.3 Million Program

Board of Directors of The Chesapeake and Potomac Telephone Company recently appropriated \$4.3 million for plant additions and improvements in the District of Columbia.

Arthur P. Low, vice president in charge of the Washington Company,

said that this appropriation will be used to provide a building addition to the Georgetown dial center, central office equipment in the Anacostia and Downtown dial centers, additional outside cable in the Dupont, Georgetown and Brookland areas, and on a number of smaller projects to care for both growth in the business and service improvements.

The company added \$12 million to its investment in plant during the year ending May 31, 1961. The total plant in service at the end of the month amounted to \$192,878,000. There were 653,705 telephones in service in the District of Columbia at the end of May, an increase of 25,162 over the same month last year.

New Federal Pacific "FP Line" Of Switchgear Raises Standards For Electrical Protective Equipment

A NEW design of power switchgear to meet the more severe requirements of modern electrical systems was introduced recently by Thomas M. Cole, president of Federal Pacific Electric Company, at a press meeting in New York City.

Mr. Cole cited the "FP" Circuit Breaker as the latest example of the important product developments that have enabled Federal Pacific to become the world's third largest manufacturer of equipment for the distribution and control of electrical energy. Several electrical devices which have contributed to FPE's success were demonstrated at the meeting.

Mr. Cole pointed out that the dramatic new design features of the "FP Line" of Power Circuit Breakers provide important benefits in costs, safety and flexibility of low-voltage electrical systems. Developed after years of research in breaker design and system requirements, the FP Breaker is "Future-Planned" to establish new standards of economy and dependability in LV protective equipment. Higher interrupting capacities and continuous-current rating of the FP Line offer the advantages of fully-rated distribution systems at cascade-system prices.

The new line is divided into two groups: the FP-50 series consists of three increased frame-size breakers based on continuous current ratings of 400-, 800-, and 2000-amperes with 50,000-ampere asymmetrical I. C. at 600 vac; the FP-100 series offers two

frame sizes with 100,000-ampere asymmetrical I. C. in continuous current ratings of 3000-, and 4000-amperes at 600 volts. Prices of the upgraded FP Line will be comparable to the previous lower-rated breakers.

PG&E to Build Large Atomic Power Plant

PACIFIC Gas and Electric Company announced plans for construction of a 325,000 kilowatt atomic power plant at Bodega Bay, 50 miles north of San Francisco. PG&E estimates that the \$61,000,000 plant, scheduled for completion in 1965, will produce electricity for slightly less than six mills per kilowatt-hour.

It is estimated that the boiling water reactor will generate electricity that is economically competitive with electricity produced in a conventional steam plant. The Bodega Bay plant will be fueled with approximately 75 tons of uranium, equivalent to more than three million tons of coal, which is expected to run the plant for three and a half years. The plant will utilize pressure suppression containment developed by PG&E, which allows the reactor to be installed below ground.

PG&E President Norman R. Sutherland said applications to the AEC and the California Public Utilities Commission for permission to build the plant will be made as soon as possible. Construction is scheduled to start in August, 1962. When completed it will be the largest atomic power plant in the country.

H. C. Wyland Elected Vice President of Commonwealth Services Inc.

HUGH C. WYLAND has been elected vice president of Commonwealth Services Inc., it was announced recently by William B. Tippy, president of the international management and engineering consulting firm.

Mr. Wyland is director of the Commonwealth Industrial Relations Department, responsible for consulting work in management organization, planning, employee and labor relations. Prior to joining Commonwealth in 1956, he had his own consulting firm, Hugh Wyland Associates. During this time he acted as project director of American Management Association and as management course and conference advisor to the Society for the Advancement of Management.

Bell System to Offer New Automatic Dialers

A MAJOR innovation in business telephone service will be available later this year as the Bell Telephone System begins to market two new types of automatic dial telephones which will provide a faster, more efficient way to handle the placing of calls, according to Robert F. Landry, assistant vice president, Marketing, American Telephone & Telegraph Company.

The new products—a card dialer and the Rapidial—are designed primarily for business use but have applications for home usage as well, Mr. Landry pointed out. Both operate on the principle of automatic dialing of pre-recorded telephone numbers.

This development in automatic dialing will be offered as an aid to people who make many calls or who call the same numbers frequently. Both models minimize errors in dialing, speed the mechanics of telephoning and increase the efficiency of the telephone as a business tool, he said.

Although similar in concept, the two new types of dialers serve slightly different business needs. The card dialer has the automatic dialing unit integrated in the set and has an unlimited capacity. Coded plastic cards on which the user has previously punched out the specific telephone number control the dialing equipment.

Rapidial is a separate unit associated with any telephone instrument and has a capacity up to 290 names and numbers. These are pre-recorded on magnetic tape. The user simply turns the selector knob to the desired name, lifts the receiver and presses the automatic dialing bar.

Both of these new telephone units share the advantage of greatly increased speed, ease of operation and accuracy, Mr. Landry said. Selection of the appropriate model, he added, depends on the telephone habits and requirements of the individual user.

Card Dialer

The card dialer has an unlimited capacity. It is controlled by a coded plastic card on which the user has previously punched out the specific telephone number with the point of a pencil.

This integrated unit combines both the telephone and the dialing equipment in one unit. It was developed by Bell Laboratories and will be manufactured by Western Electric

for the Bell Telephone System. The monthly rate is estimated at from \$3.00 to \$4.00. The card dialer was originally product-tested in Birmingham, Michigan, in the first quarter of 1960.

The card dialer has a storage space in its housing for about 40 cards. Additional cards corresponding to specified groups of telephone numbers can be filed in a separate container. When a number is to be called, the appropriate card is inserted into the dialer, the phone receiver lifted and the dial bar pushed. The automatic equipment "reads" the card and dials the number.

The Bell System sees a potentially large market for the card dialer due to its low rate and its ability to provide automated phoning with a minimum of time expended, Mr. Landry said. It has wide adaptability for any type of business application where frequent calls are made to specified groups. Like Rapidial, the card dialer eliminates the need for maintaining a personal telephone directory or special lists and is capable of handling phone numbers with up to 14 digits.

Convinced that there is a large potential for this new type of telephone equipment, the Bell System is currently experimenting with several other types of automatic dialers including Dialaphone to serve specialized applications, Mr. Landry reported.

AEC Announces Quarterly Survey of Reactor Costs

THE Atomic Energy Commission has released the results of its eighth successive quarterly survey of costs for civilian nuclear reactor projects under active design or construction for installation in the United States. Costs of \$60.6 million were incurred during the three months ended March 31, 1961.

This figure includes costs for research and development, plant and equipment, fuel fabrication, land, training, and waiver of use charges. Of the \$60.6 million total, \$52.1 million represented costs for electric power prototypes and experiments. The remaining \$8.5 million was for research and test reactors and the N. S. Savannah nuclear reactor propulsion plant.

Of the \$52.1 million for civilian power projects, \$25.6 million represented costs to publicly and privately owned utilities and \$26.5 million represented costs to the Commission.

Total estimated costs for 45 reactor projects now actively in design or construction are \$1.5 billion. Of this amount \$572.5 million had been incurred as of March 31, 1961. One new project was included for the first time and this project was essentially completed December 31, 1960.

Of the 45 civilian reactor projects 25 electric power prototypes and experiments have a total estimated cost of \$865.5 million of which \$825 million had been incurred.

Twelve projects of the twenty-five electric power prototypes and experiments are co-operatively financed. They will produce 594,273 net electrical kilowatts when operating. All of these twelve plants are scheduled to come into operation during the next four in 1962, two in 1963, and one in 1964. The Yankee Atomic Electric Co. reactor is included in the total of 594,273 even though it was delayed for first operation at the end of 1960. Since data have been collected, the Electric West Coast Nuclear Group project is in the process of termination.

Of the remaining thirteen electric power prototypes and experiments four projects are privately financed and will produce 306,750 net electrical kilowatts. They are scheduled for operation in 1962. Nine are government financed and will produce 24,050 net electrical kilowatts including the Shippingport modifications which will add an additional 40,000 net electrical kilowatts capacity to the existing plant.

Of the nineteen research and development reactors, fourteen are scheduled for planned for operation in 1962, one in 1963, two in 1964, and one in 1965. These projects are financed by AEC (8), Army (1), Other Federal Government (1), Manufacturers (1), and Universities (7).

The quarterly survey of costs for civilian nuclear power projects is based on a regular reporting system established in the Spring of 1959 with the co-operation of reactor manufacturers. Reports are requested when a project reaches the active design and construction stage.

INDUSTRIAL PROGRESS—(Continued)

Texas Eastern Transmission Plans \$85 Million Expansion

Texas Eastern Transmission Corporation will begin construction immediately on new facilities authorized by the Federal Power Commission, according to an announcement by the company. Facilities to be constructed, which have received temporary authorization, are the initial phase of a program designed to increase the daily delivery capacity of Texas Eastern's natural gas system by 225 million cubic feet. The first phase, to be completed during 1961, will increase the system's daily delivery capacity by approximately 76,000 cubic feet. The second phase, to be completed in 1962, will bring the expanded volume to the 225 million cubic feet proposed.

The expansion will require construction of a new line across north Louisiana into Mississippi, construction of one new compressor station, addition of compressor horsepower at several other stations, construction of numerous loop and lateral pipelines between Kosciusko, Mississippi, and Lambertville, New Jersey, and necessary metering and regulating facilities, the announcement said.

The first stage of the program will include a 165-mile long 20-inch diameter pipeline from West Monroe, Louisiana, to Kosciusko, Mississippi, and approximately 128 miles of 30-inch diameter pipeline loops between Kosciusko and Lambertville, New Jersey. This will leave 293 miles of pipeline out of the total of approximately 475 miles needed to complete the two-year program.

In addition, the first phase will call for addition of approximately 51,000 total compressor horsepower to be installed at various stations already in operation and the construction of one new compressor station at Monroe, Louisiana. Horsepower will be added to Company's Danville, Kentucky; Gladeville, Tennessee; and Berne, Ohio compressor stations. It is anticipated that the first phase of the construction will cost approximately \$48 million with the cost of the entire project expected to reach about \$85 million.

E Ships First 95-Kv BIL Heavy-duty Bus To Commonwealth Edison Company

GENERAL utility industry's first 95-Kv BIL heavy-duty bus was shipped to Commonwealth Edison Company's plant at Waukegan, Illinois, early in June, according to an announcement by General Electric Company.

The bus, which is assembled into the longest three-phase pack, was shipped by industry, the bus section includes bus conductors and stretches thirty-two feet to connect generator terminals and power transformer bushings.

Built by General Electric Company's High Voltage Busgear Department, the three-phase bus is rated 1,000 amperes, 18 Kv, 95 Kv BIL. The new G-E all-welded bus was manufactured in accordance with a unique design concept which reduces heating in external steel to practically zero.

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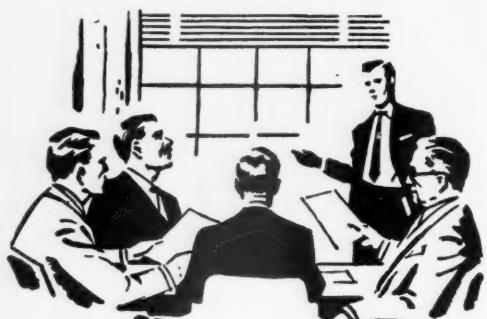
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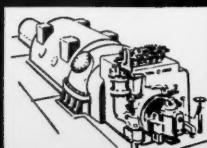
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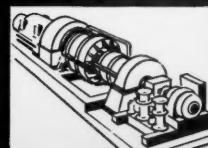
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